November 2017

Understanding the Relationship between Informal Interactional Diversity and Males' Engagement in the Undergraduate Experience

Amanda Cutchens
University of South Florida, acutchens@mail.usf.edu

Understanding the Relationship between Informal Interactional Diversity and Males' Engagement in the Undergraduate Experience

by

Amanda Cutchens

A dissertation proposal submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
With a concentration in Curriculum and Instruction
Department of Leadership, Counseling, Adult, Career, and Higher Education
College of Education
University of South Florida

Major Professor: Thomas Miller, Ed.D.
William Young, Ed.D.
Robert Sullins, Ed.D.
John Ferron, Ph.D.

Date of Approval
October 4, 2017

Keywords: Social Integration, Informal Interactional Diversity, Student Engagement
Undergraduate Males, Co-Curricular Dialogue, Multicultural Competence

DEDICATION

This dissertation is dedicated to my daughters, Abigail Elizabeth and Emma Marie. I love you more than words could ever express. Everything I do is done with the hope of creating a better life for both of you. There were many times I wanted to give up during this process. There will be times throughout your lives that you feel the same way. But don't give up. You will always have at least two people in your corner – Mom and Dad.

Listen to the MUSTN'TS, child(ren),
Listen to the DON'TS
Listen to the SHOULDN'TS
The IMPOSSIBLES, the WON'TS
Listen to the NEVER HAVES
Then listen close to me -
Anything can happen, child(ren),
ANYTHING can be.

-Shel Silverstein, *Where the Sidewalk Ends*

ACKNOWLEDGEMENTS

Five years. It took five years and much support to reach this point in my doctoral journey. I am truly grateful for the many individuals who helped me get here. Each one has contributed time and effort – two things which I hold most dear – and for that I would like to offer my sincere thanks.

To the members of my committee, both past and present, I appreciate each of you. Dr. Don Dellow, you began this journey with me in the fall 2012 semester. Thank you for helping me figure out where to begin, how to form the right research questions, and how to write a proposal for a dissertation rather than write an argument for one. Dr. Jeff Kromrey, you taught me statistics. Without your guidance, I would not have a methods section. Dr. John Ferron, thank you for taking over where Dr. Kromrey left off. You explain statistics with both grace and elegance to those of us who are statistically challenged. Dr. Robert Sullins, thank you for your contributions to my dissertation and interest in my research. You, sir, are super. Dr. William Young, thank you for your humor and for being my friend on Facebook. And to Dr. Tom Miller, you are one of my greatest mentors. You supported me through not just one, but TWO degrees. I cannot thank you enough for your patience and time. You knew I would be high maintenance, but you took me on without question when Dr. Dellow retired. God bless you. Thank you.

To the faculty and staff of the Honors College at the University of South Florida, your support and flexibility was, in part, how I completed this degree. To Dr. Charles Adams, dean of the Honors College, thank you for checking in on my progress and telling me to keep going. Dr. Shawn Bingham, assistant dean of the Honors College, thank you for keeping me company in the office on the weekends while doing your own research. Dr. Stuart Silverman, previous dean of the Honors College, thank you for always being in my corner and continuing to support me even in retirement. Cayla Lanier and Reggie Lucien, thank you for understanding without me having

to say anything, for encouraging me, and for praising my accomplishments. You can do this too. To the Office of National Scholarships staff and the rest of the Honors College advising team, staff, and faculty, thank you for stopping by my door and celebrating my wins. To Tori Phillips, Megan Braunstein, and Lauren Roberts, the three graduate assistants who I supervised while completing this journey, thank you for understanding and stepping in when I could not be there. You are superstars. You helped me build and improve the Honors College Student Council, which is a student organization I love and admire.

To my peers in this Ph.D. program – Dr. Cara Chernoff, Billy Houder, Julie Leos, Dr. Laurie-Ann Spencer, and Viancca Williams – class would not have been the same without you. I truly appreciate your advice, support, and genuine care about my well-being.

To Dr. Robert Gonyea at NSSE, thank you for taking the time to review my original dissertation study and make suggestions that improved it, as well as for providing me all the forms and instructions to gather my data. You went above and beyond what you needed to for me, and without that my entire study would have suffered.

To my mom, thank you for inspiring me to reach for the moon; you set the bar, Dr. Levine-Brown, and I will always be grateful. Thank you for also listening to me in times of both happiness and frustration and never wavering in your support. To my dad, thank you for driving 300 miles roundtrip every week for five months to help take care of Abbie while I took classes and for cheering me on despite challenges I faced in this process. And to my mother-in-law, thank you for never hesitating to help whenever I/we asked for it. I could not have finished my coursework or managed my full-time job during this process without you.

And finally, to Josh – my husband, my partner, and my best friend. Thank you. Through this journey we saw your graduation, the birth of our two beautiful babies, 17 months of living

together part-time for a full-time position, your promotion, and more complications and successes along the way than I can name. You never questioned my ability even when I questioned it. You never complained. You just loved me. And for that, I am grateful. Always and forever.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The diversity of the undergraduate student population encourages understanding of others and provides opportunities for students to challenge their assumptions of cultures, political and religious views, values, and personal backgrounds. However, it also creates challenges for academic and student success as faculty and administrators struggle to meet different generational and cultural needs. A broader, more inclusive definition of student success may help meet the needs of a more modern complex institutional student demographic. It may also allow for new avenues of research specifically related to success for Black, Hispanic, and White undergraduate male students, as these students continue to struggle in higher education (Bailey & Moore, 2004; Barker & Avery, 2012; Conger & Long, 2010; Harper, 2006b; Harper & Kuykendall, 2012; Kuh & Love, 2000; Kuh et al., 2007; Sax & Arms, 2006; Sax & Harper, 2007; Spruhill, Hirt, & Mo, 2014; Strayhorn, 2010a; Sutton & Kimbrough, 2001).

Meanwhile, the concept of globalization and global citizenship are being integrated into higher education at many levels in both academic and student affairs. Many institutions are integrating these concepts into policies and programs, which provide opportunities for diverse interactions, conversations, and experiences. Informal interactional diversity, which is defined as "the opportunity to interact with students from diverse backgrounds in the broad, campus environment" (Gruin, 1999, para. 4), is a concept related to globalization and global citizenship, but not much research exists to show how it might impact student success. Therefore, the purpose of this study was to further explore informal interactional diversity in Black, Hispanic, and White undergraduate males and its possible relationship to the multi-faceted nature of student engagement. The resulting framework for this study was built around Tinto's (1993) theory of social integration, Astin's (1993a) theory of student involvement, and persistence

research by Pascarella and Terenzini (1991) because these models highlighted important environmental factors that informed research on informal interactional diversity.

In this quantitative study, the researcher utilized a purposeful, national sample of secondary data from the National Survey of Student Engagement (NSSE) to analyze levels of informal interactional diversity in Black, Hispanic, and White undergraduate men. The sample included 3,613 Black, Hispanic, and White undergraduate men who were enrolled at five participating large, public predominantly White institutions (PWIs) in the United States and completed the survey with an appended Experiences with Diverse Perspectives topical module in 2013 and 2014. The majority of the males in the sample were White and classified as seniors, or fourth-year undergraduate students (n = 1,830).

Statistical analyses, such analysis of variances (ANOVAs) and multiple regressions tests, were conducted to examine the relationships between variables (informal interactional diversity, classification in college, and student engagement). Results of the analysis indicated the relationships between informal interactional diversity, male ethnic group, and student engagement were statistically significant. Additionally, findings indicated there was a significant relationship between levels of informal interactional diversity and classification in college, as well as classification in college and male ethnic group.

Implications for future research based on the findings of this study included: a) investigating how reflective and integrative learning, as well as supportive environment, affect engagement for the undergraduate male populations studied; b) examining why decreases in qualitative reasoning, effective teaching practices, and collaborative learning occur for these undergraduate male populations; c) investigating these variables using samples of participants at different types of institutions; and d) conducting a mixed-methods study with a qualitative

portion, or a purely qualitative study, focused on male student perceptions of informal interactional diversity, student engagement, and campus climate or race relations at PWIs to gain more insight on the lived experience of Black, Hispanic, and White males.

The conclusion of this research study was that the findings support much of the literature related to informal interactional diversity, as well as the success of Black, Hispanic, and White males.

CHAPTER ONE

Introduction

The increasing diversity of college students in the United States presents many opportunities for increased cultural awareness and understanding of others. Exposure to diverse political and religious views, values, backgrounds, and friendships, challenge assumptions and create possibilities for important developmental impacts during college (Pascarella, 2006). In addition, Pace (1984) posited that the quality of students' personal and social effort was tied to meaningful campus activities that promote opportunities for association outside of the classroom, including interactions with faculty members, administrators, and other students. However, the resulting diversity of the student population also creates challenges for academic and student success, as faculty and administrators struggle to meet different generational and cultural needs.

First, finding a comprehensive definition of student success presents many challenges when conceptualizing success for historically under-represented students. Much research on the construct of student success has used traditional measures of academic achievement, including scores on standardized college entry exams, college grades, and credit hours earned in consecutive terms; however, empirical evidence suggests that standardized exams and classroom learning environments may be biased toward certain cultural backgrounds (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Nora & Crisp, 2012). Other researchers have suggested that student satisfaction and students' impression of institutional quality should be thought of as dimensions of student success (Astin, 1993a; Hossler, Schmit, and Vesper, 1999). Still, others posit that a range of personal and cognitive development outcomes (Pascarella & Terenzini, 2005); student engagement (Kuh & Love, 2000; Pascarella & Terenzini, 2005); appreciation for human differences and commitment to democratic values (Association of American Colleges and Universities, 2002); and the capacity to engage with people from different backgrounds to

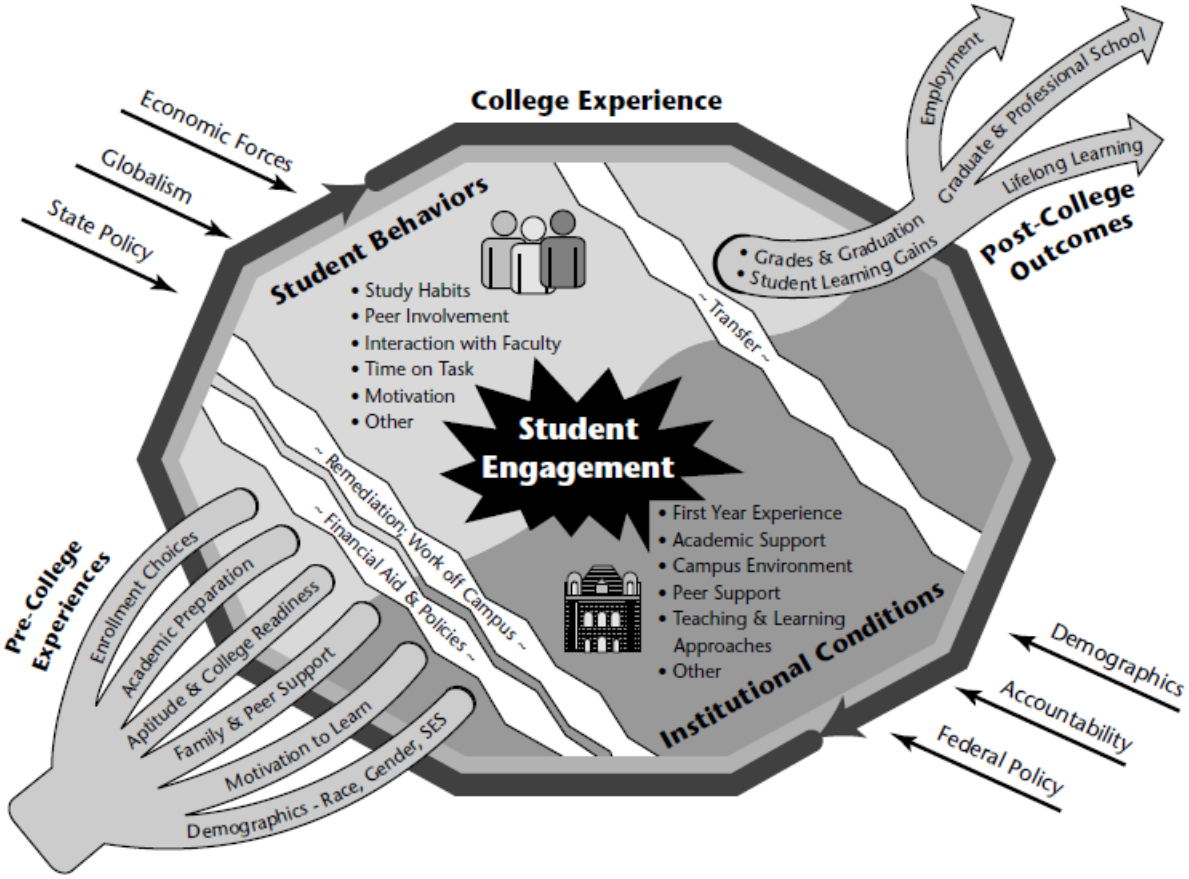
effectively solve problems (as cited in Evans, Forney, Guido, Patton, & Renn, 2010) are all factors that constitute student success.

In addition to the above studies, which represent a student's experiences as it relates to his or her success, other research points to the responsibility of the institution to create an inclusive environment and culture of understanding for a more diverse student body (Lundberg, 2010). For example, students of color have limited access to faculty of color, who are also under-represented in postsecondary education (as cited in Lundberg, 2010). When this fact is combined with the power differential between students and faculty as a whole, it creates an imbalance of institutional power (Lundberg, 2010). The resulting exposure to a discriminatory environment, perceived or real, in the classroom and on campus has been described as a major factor accounting for differences in withdrawal behavior between minorities and non-minorities (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Fleming, 1984; Hurtado, 1992; Hurtado, Carter, & Spuler, 1996; Smedley, Myers, & Harrel, 1993). The subsequent potential for racial prejudice may impede a minority student's interactions with non-minority students, faculty, and campus administrators, which affects his or her decision to continue enrollment.

Therefore, a broader, more inclusive definition of student success may help faculty and administrators meet the needs of a more modern complex institutional student demographic. According to Kuh et al. (2007, p. 10), "student success is defined as academic achievement; engagement in educationally purposeful activities; student satisfaction; acquisition of desired knowledge, skills, and competencies; persistence; and attainment of educational objectives." This definition is guided by a framework (see Figure 1.1.) that analyzes students' precollege experiences, post-college outcomes, and the student behaviors and institutional conditions that facilitate and hinder student engagement and the college experience as a whole. This definition

and framework are unique in that they consider applications to under-represented students, particularly Black and Latino male students who are most at-risk for persistence in higher education (Bailey & Moore, 2004; Barker & Avery, 2012; Harper, 2006b; Harper & Kuykendall, 2012; Kuh & Love, 2000; Lundberg, 2010; Strayhorn, 2010a; Sutton & Kimbrough, 2001).

Figure 1.1 What Matters to Student Success



[*Figure 1.1.* What matters to student success, by Kuh et al., 2007. This figure illustrates the influence of pre-college experiences and college experiences on post-college outcomes.]

Once students enter college, a range of factors related to their college experience can contribute to or hinder their success. According to Kuh et al., (2007), the extent to which students take part in educationally effective practices and the degree to which they perceive the college environment to be supportive of their academic and social needs are the best predictors

for student satisfaction and success. Yet, student engagement and perceived support may be different depending on institutional type.

Based on research related to student engagement at minority-serving institutions (MSIs) and predominantly white institutions (PWIs), cultural capital appears to play a role in the type of institution students of color choose to attend (Albritton, 2012; Bernhardt, 2013; Núñez & Bowers, 2011; Núñez, Sparks, & Hernández, 2012; Strayhorn, 2010a). In this context, cultural capital is understood as cultural heritage, race, or ethnicity that confers status and power; this status and power acts like capital, which can be accumulated or exchanged. For example, African American students who attend historically black colleges and universities (HBCUs) demonstrate better academic performance, higher graduation rates, an increased likelihood of pursuing advanced degrees, and higher occupational aspirations, compared with those of their African American counterparts at PWIs (Flowers, 2003; Kugelmass & Ready, 2010; Price, Spriggs, & Swinton, 2011). This may exist in part because of perceived stronger support systems at HBCUs, which are particularly important to African American men who benefit from being able to make connections between life activities and learning in the classroom (Dawson-Threat, 1997). In contrast, African American students at PWIs report spending more energy dealing with feelings of alienation and frustration due to a lack of campus support (Watson and Kuh, 1996).

Peer interactions and relationships are also important to social integration and student success, particularly for students of color. In fact, Hurtado and Carter (as cited in Kuh et al., 2007) found belonging to campus religious organizations and discussing course topics with peers outside class were important to Latino students' ability to cope with stress. In addition, student-led leadership programs, particularly those established at PWIs, have been shown to serve a

critical role in facilitating cultural connections and increasing Black male persistence and engagement (Barker & Avery, 2012).

Problem Statement

Kuh et al. (2007) present a definition of student success and a framework that allows for new avenues of research specifically related to success for undergraduate male students. Increasing opportunities for inclusive institutional environments, in which relationships are fostered and diverse perspectives are valued, as well as engaging Black, Hispanic, and Caucasian males in informal conversations about values and social issues may increase critical thinking skills and the desire to learn. In fact, findings from a recent study of the conditional nature of high impact practices on student learning outcomes suggests diversity experiences and meaningful discussions with diverse peers have a significant general effect on cognitive skills and orientations toward inquiry and continued learning (Seifert, Gillig, Hanson, Pascarella, & Blaich, 2014).

These experiences may support informal peer group associations, semi-formal extracurricular activities, and interaction with faculty and administrative personnel within the institution (*social integration*), as well as informal interpersonal dialogue or conversation related to intellectual and cultural topics concerning values and social issues (*co-curricular dialogue*). The National Survey of Student Engagement (NSSE) provides data on the topic of experience with diverse perspectives, which is a combination of indicators, such as supportive campus environment and discussions with diverse peers, related to social integration and co-curricular dialogue (see Figure 1.2). Comparing this information with that of the NSSE Engagement Indicators (EIs), which provide information about student experiences with academic challenge at the institution, peers, faculty, and campus environment, may contribute to the literature on student success and inform student affairs practices for these populations.

Figure 1.2 Experiences with Diverse Perspectives Topical Module

1. **During the current school year, to what extent have events or activities *offered at your institution* emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.)?**

	Very much	*Quite a bit*	*Some*	*Very little*
	O	O	O	O

2. **During the current school year, about how often have you *attended* events or activities that encouraged you to examine your understanding of the following?**

	Very often	*Often*	*Sometimes*	*Never*
a. Economic or social inequality	O	O	O	O
b. Issues of race, ethnicity, or nationality	O	O	O	O
c. Religious or philosophical differences	O	O	O	O
d. Different political viewpoints	O	O	O	O
e. Issues of gender or sexual orientation	O	O	O	O

3. **During the current school year, about how often have you had *discussions about* the following?**

	Very often	*Often*	*Sometimes*	*Never*
a. Economic or social inequality	O	O	O	O
b. Issues of race, ethnicity, or nationality	O	O	O	O
c. Religious or philosophical differences	O	O	O	O
d. Different political viewpoints	O	O	O	O
e. Issues of gender or sexual orientation	O	O	O	O

[*Figure 1.2.* Experiences with diverse perspectives topical module, provided by the NSSE, 2013. This figure illustrates a topical module within NSSE that provides complementary questions that are intended to explore students' understanding of differences in society.]

NSSE was designed to measure both student engagement in empirically derived best practices in higher education and what students gain from their experience in college (Kuh, Hayek, Carini, Ouimet, Gonyea, & Kennedy, 2001). The term Engagement Indicator (EI) is used to represent the multiple dimensions of student engagement (National Survey of Student Engagement, 2016). Of specific interest to this study are EIs related to discussions with diverse others and supportive environments because these items focus on both discussions with people from diverse backgrounds and engagement in activities related to diversity. However, the relationship between the topical module and all EIs will be explored (see Figure 1.3). Of related interest is a topical module related to student experiences with diverse perspectives.

Figure 1.3 NSSE Engagement Indicators

Theme	Engagement Indicators
Academic Challenge	Higher-Order Learning
	Reflective & Integrative Learning
	Learning Strategies
	Quantitative Reasoning
Learning with Peers	Collaborative Learning
	Discussions with Diverse Others
Experiences with Faculty	Student-Faculty Interaction
	Effective Teaching Practices
Campus Environment	Quality of Interactions
	Supportive Environment

[*Figure 1.3.* NSSE engagement indicators, provided by the NSSE, 2017. This figure shows what each NSSE Engagement Indicator is and how each is related to one of four themes.]

Beginning in 2013, institutions that participated in the distribution of the NSSE survey could append up to two topical modules, which were short sets of questions on designated topics, such as experiences with diversity ("NSSE Topical Modules", 2017). These modules were intended for deeper exploration of important areas based on campus needs, as determined by those administering the survey. The Experiences with Diverse Perspectives Topical Module "examines activities that promote greater understanding of societal differences" ("NSSE Topical Modules", 2017) and complements questions related to the discussions with diverse others EI and supportive environments EI on the core survey.

Purpose

According to Gruin (1999), informal interactional diversity is "the opportunity to interact with students from diverse backgrounds in the broad, campus environment" (para. 4). As described above, social integration and co-curricular dialogue are integral components of this

concept. However, not much research exists to show how these types of interactions might impact undergraduate male student success.

Hu and Kuh (2003) examined the effects of interactional diversity experiences on student learning and personal development for different groups of students at different types of institutions. Their findings suggested meaningful relationships with students from different backgrounds and engagement in informal interactional diversity could increase undergraduate students' self-reported gains in all areas measured on the College Student Experience Questionnaire (CSEQ). Yet, the data collected in this study were outdated and may have been collected by institutions using different sampling and administration procedures. Alternatively, data collected using the NSSE instrument is current and standardized. Therefore, the purpose of this study was to further explore informal interactional diversity in undergraduate males and its possible relationship to the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment using data provided by NSSE. These constructs are measured by Engagement Indicators (EIs) on the NSSE, which measure student learning and personal development.

Research Questions

1. What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (White, Black or African American, Hispanic or Latino) at large, public predominantly White institutions?
2. What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (White, Black or African American, Hispanic or Latino)

holding different academic ranks (freshman, sophomore, junior, senior) at large, public predominantly White institutions?

3. What are the relationships between the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, and the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment (NSSE Engagement Indicators) for different male ethnic groups (White, Black or African American, Hispanic or Latino) who are enrolled in large, public predominantly White institutions?

Significance of Study

The free exchange of ideas and knowledge and the autonomy to participate in programs and engage in self-directed learning make higher education institutions the perfect environment for learning different perspectives (Hser, 2005). Interactions that introduce students to the diversity of political and religious views, values, backgrounds, and friendships, challenge cognitive assumptions and have the potential for important developmental impacts during college (Pascarella, 2006). In addition, Kuh (2008) suggested high-impact practices, such as study abroad, can be life-changing for all undergraduate students. As a result, concepts related to globalization, global competitiveness, adaptability, and global citizenship are integrated into higher education curriculum, programming, and institution-wide strategic planning.

As such, many undergraduate students participate in study abroad, live with a diverse student body in residence halls, and attend international service-learning programs. At many institutions, the concept of globalization has been integrated into quality enhancement plans (QEPs), which guides much of the programming related to both academic and student affairs

(Digeorgio Lutz, 2010). These policies, programs, and situations provide a multitude of opportunities for diverse interactions, conversations, and experiences. They also provide chances for students to develop a diverse social support network, interact in informal situations with faculty, and engage in conversations related to diverse values and social issues. As a result, exploring the relationship between informal interactional diversity and undergraduate males' engagement in college may help higher education administrators develop structured and intentional programming to address the disparity of success among these students.

Operational Definition Terms

Black/African American – This study will use these terms interchangeably to describe the race or ethnicity of those who self-identify with this group, as indicated by their response on the National Survey of Student Engagement (NSSE).

Co-curricular dialogue – In this study, co-curricular dialogue/conversation is defined as informal interpersonal dialogue or conversation related to intellectual and cultural topics concerning values and social issues (Pace, 1984).

NSSE – The National Survey of Student Engagement (NSSE) is a survey instrument used to assess student behavior inside and outside of the classroom, institutional actions and requirements, and student reactions to college. Additionally, it is designed to measure student estimates of both educational and personal growth. This study will include NSSE survey instruments that include an optional added feature, called a topical module, which measure student experiences with diversity.

Informal interactional diversity – In this study, informal interactional diversity will be defined as "the opportunity to interact with students from diverse backgrounds in the broad, campus environment" (Gruin, 1999, para. 4) and will be measured by the Experiences with Diverse Perspectives Topical Module scores on the NSSE. This index is a measure of how experiences

and conversations with peers from different backgrounds and varying perspectives affect the development and capacity of college students.

Hispanic/Latino – This study will use these terms interchangeably to describe the race or ethnicity of those who self-identify with this group, as indicated by their response on the National Survey of Student Engagement (NSSE).

Social integration – For the purpose of this study, social integration is defined as informal peer group associations, semi-formal extracurricular activities, and interaction with faculty and administrative personnel within the institution, which result in varying degrees of social communication, friendship support, and collective affiliations that increase a student's connection to the institution (Tinto, 1975).

Student Engagement – Within the context of this study, student engagement is a term used to describe the multi-dimension ways in which students interact with their institution and the ways in which the institution interacts with students. It will be measured by the 10 Engagement Indicators (EIs) on the National Survey of Student Engagement (NSSE). These EIs are categorized into four main themes, academic challenge, learning with peers, experiences with faculty, and campus environment, which will be further explored in the literature review.

White/Caucasian – This study will use these terms interchangeably to describe the race or ethnicity of those who self-identify with this group, as indicated by their response on the National Survey of Student Engagement (NSSE).

Limitations

Limitations of the study included data that were based on self-reported learning gains from students who participated in the NSSE survey during the data collection periods. In addition, the data included demographic information from those students who self-identified as African American or Black, Hispanic or Latino, or White. According to Evans et al., (2010),

mixed-race and multi-ethnic identities challenge traditional perceptions of race and ethnicity, which American society has adhered to for centuries. Therefore, those students who identified as mixed-race or multi-ethnic and did not believe they fit into defined categories outlined in the demographic section of the NSSE, may have chosen other and would have been overlooked in this study.

Moreover, the data included only African American/Black, Hispanic/Latino, and White/Caucasian male undergraduate students who completed NSSE surveys at participating large, public PWIs during the specified years. According to research by Hu and Kuh (2003), different institutions afford different types of student experiences, such as diversity interaction, institutional culture, student involvement, and research and other scholarly opportunities. Therefore, the researcher limited the sample to undergraduate male students who were enrolled at large, public PWIs. As a result, institutions of smaller sizes with enrollments of less than 20,000 students were excluded from the data. Finally, graduate students were not included in the sample because the researcher wanted to focus on the undergraduate student experience.

Theoretical Framework

The theoretical framework for this study was based on Tinto's (1993) theory of social integration, Astin's (1993a) theory of student involvement, and persistence research by Pascarella and Terenzini (1991). These models highlighted important environmental factors, such as the development of social networks, student-student interaction, the influence of peer groups, and the effects of a positive peer culture, which informed research on informal interactional diversity.

Tinto (1993) argued that social integration could only begin after students separated from their former networks, such as family members and high school peers, and incorporated the normative values and behaviors of the new group. Presumably, those who leave college are

those who are unable to distance themselves from their former social networks and integrate into the new culture. Therefore, college culture and the many diverse experiences that make up that environment, may contribute to a student's ability to connect with his or her institution and impact his or her success. In addition, Tinto (1993) posited that the formation of new social networks, which include the interpersonal relationships students build with faculty, staff, peers, and mentors during college, contributed to student satisfaction, persistence, and students' overall college experience. Co-curricular activities, organizational structure, campus climate, pedagogical approaches outside the classroom, and academic climate, are aspects of those interpersonal relationships that may impact male student success.

According to Astin (1993a), the most significant impact on student achievement and development is the frequency and quality of student-student and faculty-student interaction. In his pioneering study of the benefits of student involvement, student-student interaction was defined as a measure of items related to discussions with other peers and time spent socializing with peers outside of the classroom. In addition, both Astin (1993b) and Villaplando (1994) found that socializing across racial lines and participating in discussions of racial issues were associated with positive academic and personal development, irrespective of race. More specifically, socializing with someone of a different racial group or discussing racial issues contributed to a student's academic development, satisfaction with college, level of cultural awareness, and commitment to promoting racial understanding (Villaplando, 1994).

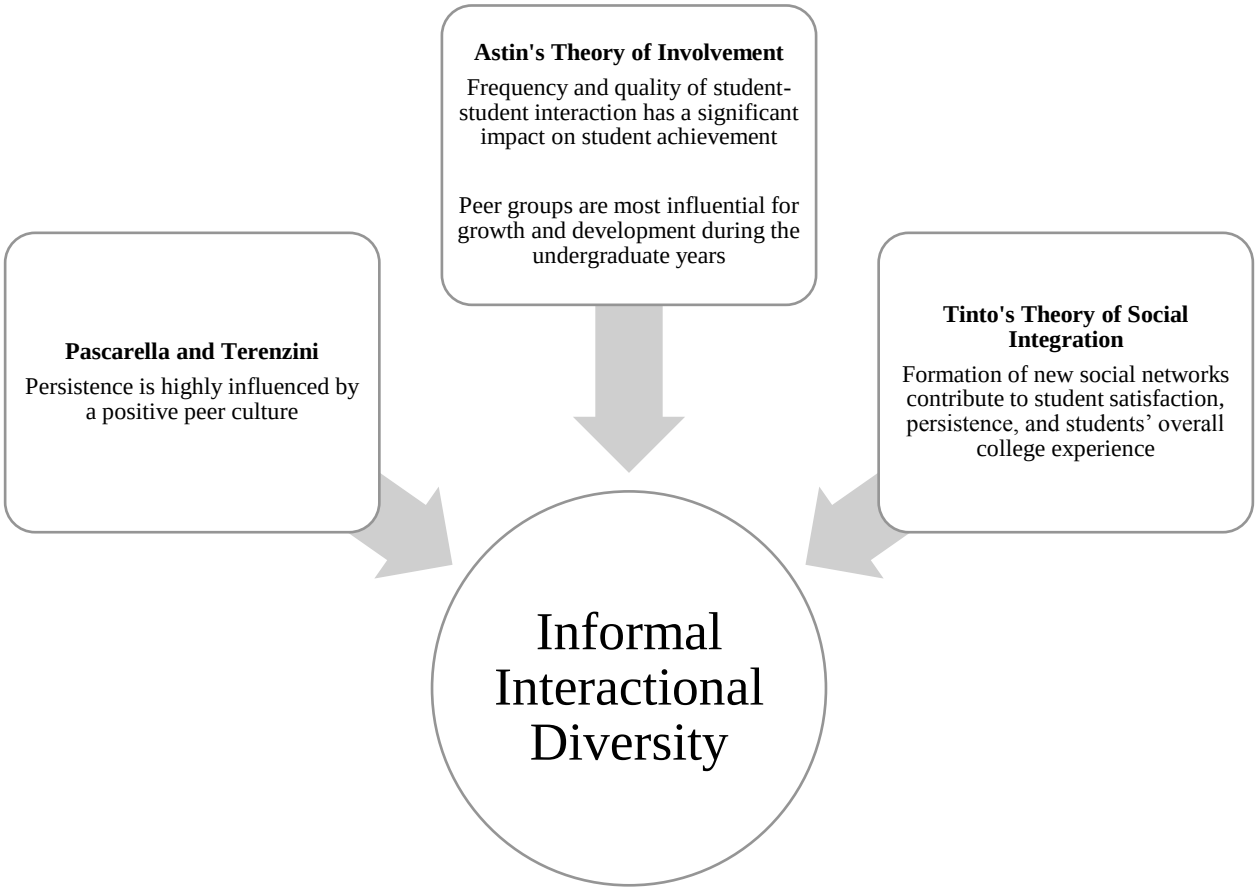
Astin (1993a) also pointed to the peer group as the single most powerful source of influence on growth and development during the undergraduate years. He concluded higher frequency of student-student interactions were directly related to improvement in GPA, graduating with honors, analytical and problem-solving skills, leadership ability, public speaking

and interpersonal skills, preparation for graduate and professional school, and general knowledge. Additionally, Spruill, Hirt, and Yo, (2014) found that peer values, particularly those associated with educational attainment and intellectual skills, had a positive correlation with male persistence, regardless of race or ethnic background.

The influence of peer groups in both academic and nonacademic activities was again echoed in student retention research conducted by Pascarella and Terenzini in 1991. In general, they determined a student's college experience was most affected by the extent to which he or she utilized the people, programs, facilities, opportunities, and experiences the college makes available. This was demonstrated even after college size and student body selectivity were taken into account. In addition, Pascarella and Terenzini (1991) analyzed of over 2,500 empirical studies on how college affects students and found that persistence was highly influenced by, among other things, a peer culture in which students develop close on-campus friendships.

Considering the positive effects of student-student interaction, the influence of peer groups, and the effects of a positive peer culture in the classroom, one may think it reasonable to explore if and how these environmental factors used outside the classroom might be related. In fact, many alumni reported that their most significant and memorable learning experiences occurred in environments separate from the academic setting, such as in the residence hall, in a student group, or participating in a student activity (Marchese & Hutchings, 1990). Therefore, the researcher explored how these elements may relate to the success of undergraduate males.

Figure 1.4 Theoretical Framework for the Study of Informal Interactional Diversity and Male Undergraduate Success



[*Figure 1.4*. Theoretical framework for the study of informal interactional diversity and male undergraduate success, by A.B. Cutchens, University of South Florida College of Education. This figure illustrates the theories and research that inform this study.]

Overview of Methods

Secondary data were obtained from the Center of Postsecondary Research and Planning's NSSE self-supported auxiliary unit at Indiana University. Data specifications provided to the national data source for the sample included surveys from:

- Undergraduate African American or Black; Hispanic or Latino; and White male students

- Large, public PWIs (traditional institutions with majority White students; non-HBCUs or HSIs)
- Institution size of 20,000 students or more
- Institutions that appended the Experiences with Diverse Perspectives Topical Module
- Data collected during the academic years of 2013 and 2014

The NSSE inventories student learning and progress toward desired outcomes of college (Kuh, et al., 2001). Five key elements for effective educational practice, including level of academic challenge, active and collaborative learning, student interactions with faculty members, enriching educational experience, and supportive campus environment, are factored into the 40-item survey (Kuh, et al., 2001). Survey instruments can be administered using both paper and online formats and take an estimated time of 12 minutes to complete (Kuh, et al., 2001). NSSE was optimized for mobile devices beginning in 2016. It designed to measure both student engagement in empirically derived best practices in higher education and what students gain from their experience in college and uses self-reported data from participants (Kuh, et al., 2001). Inferential statistics were used to analyze the NSSE and determine the relationships between the Experiences with Diverse Perspectives Topical Module and undergraduate males' engagement.

Summary

This chapter provided an introduction to the problem that was addressed in this study, the purpose, significance, and limitations of this study, as well as the research questions explored and an overview of the methods used. However, there were many factors to consider before any evaluation of the data was completed. Therefore, the next chapter provides a literature review of student success definitions and related multicultural factors, racial and ethnic identity

development for Black, Hispanic, and White male students, and the potential benefits of informal interactional diversity.

CHAPTER TWO

Review of Literature

Several studies have shown that males earn degrees at lower rates than females (Conger & Long, 2010; Kuh et al., 2007; Sax & Arms, 2006; Sax & Harper, 2007; Spruhill, Hirt, & Mo, 2014). Even more research provides evidence that under-represented males, such as Blacks and Hispanics, in higher education are at-risk for persistence (Bailey & Moore, 2004; Barker & Avery, 2012; Harper, 2006b; Harper & Kuykendall, 2012; Kuh & Love, 2000; Strayhorn, 2010a; Sutton & Kimbrough, 2001). For example, Black men represent the lowest degree-completion rate among both sexes and all racial groups (Strayhorn, 2010a). These students are 20 percent less likely to complete college within six years (Cabrera et al., 1999). In addition, less than a quarter of Hispanic postsecondary students graduate with a four-year degree within 10 years of high school graduation (Strayhorn, 2010a). While involvement and engagement can improve success and academic achievement for these students in postsecondary education, there is still little improvement in their graduation rates. As a result, faculty and administrators continue to look for opportunities to increase chances for success for male students.

Daily interactions with faculty and peers in an increasingly diverse college environment provide opportunities to engage with others from different backgrounds and discuss multiple perspectives. These instances of informal interactional diversity may benefit male students and are the focal point of this study. However, there is a myriad of factors to consider before exploring whether this specific construct applies. For example, what are the current issues that may help or hinder student success in higher education? Also, how is the college experience different for undergraduate males from various backgrounds and how could this affect their success? Therefore, this chapter will provide an overview of: 1) what student success is and the multicultural factors that contribute to it, 2) racial and ethnic identity development for Black,

Latino/Hispanic, and Caucasian male students, and 3) how informal interactional diversity may benefit these students.

Student Success

Developing a comprehensive definition of student success presents many challenges, especially when considering the impact of different success factors for historically under-represented groups. Researchers have suggested the construct of student success be determined by traditional measures of academic achievement (as cited in Kuh et al., 2007); student satisfaction and students' impression of institutional quality (Astin, 1993a; Hossler, Schmit, & Vesper, 1999); personal and cognitive development outcomes (Pascarella & Terenzinin, 2005); student engagement (Kuh & Love, 2000; Pascarella & Terenzinin, 2005); appreciation for human differences and commitment to democratic values (Association of American Colleges & Universities, 2002); cultural competence and self-authorship (Pope, Reynolds, & Mueller, 2004: Torres & Baxter Magolda, 2004); and the degree to which the institution maintains an inclusive environment or culture (Lundberg, 2010; Reason, 2009). However, these singular approaches make it difficult to consider all of the ethnic and racially diverse needs that make up the modern college campus and university student population. In fact, Rendon, Novack, and Dowell (2005) pointed out that many ignore the complex differences, culturally and ethnically, of Hispanic, African American, and Asian American students specifically. As a result, multicultural competence, or an amalgamation of the awareness, knowledge and skill required to work effectively with such a diverse student body, is something for which student affairs practitioners have developed entirely new core competencies (Pope, Reynolds, & Mueller, 2004).

Overview of Multicultural Competencies

According to Pope et al. (2004), multicultural awareness, knowledge, and skills should be integrated into six core student affairs competencies: administrative and management, theory and translation, helping and interpersonal, ethical and legal, teaching and training, and assessment and evaluation. Each of these competency areas constitute knowledge and abilities that are necessary in the field. Yet, there are two areas that may be more relevant to this study: administrative/management and teaching/training. When placed in a multicultural context, these specific areas highlight issues that appear to directly impact student success for all students, particularly students of color.

The administrative and management competency is related to student affairs professionals' efforts to complete common tasks, such as fiscal management, resource allocation, strategic planning, time management, delegation of tasks, and task supervision (Pope et al., 2004). Examples of exemplary multicultural competence in administrative and management tasks are identifying diversity issues as central to the department or division, cultivating supervisory relationships where cultural issues are discussed, and assessing student satisfaction with the multicultural sensitivity of the organization's services or outreach efforts.

The teaching and training competency is connected to formal classroom style teaching, as well as those capabilities necessary to design and present workshops, implement staff development training, and discuss relevant issues with individuals and groups on campus (Pope et al., 2004). Cultural assumptions and beliefs, faculty makeup, student makeup, and even the conceptual frameworks and vocabulary used within the classroom and training environments can affect the learning process (Pope et al., 2004). According to Pope et al. (2004), some examples of exemplary multicultural competence in teaching and training are infusing cultural diversity

issues and content into all curriculum programs and training designs, intentional efforts to solicit formative and summative feedback before, during, and after the semester or year, and recognizing how social issues like racial identity and experiential characteristics can influence how students react to multicultural interventions.

While the particular competencies above were discussed in the context of student affairs practice, they can also be applied to effective uses for faculty and peers. For example, infusing globalization into higher education curriculum may help students explore non-western perspectives and better understand others. Similarly, student organizations that recognize diversity in their mission and vision statements may provide a more welcoming environment to other students from diverse backgrounds. In addition, those student groups connected to multicultural affairs that may provide outreach to under-represented groups can also provide effective training to groups from different ethnicities or races. Each of these examples are opportunities for informal interactional diversity.

Student Success and Identity Development

Criticism of the theoretical models used to study racial and ethnic student groups (Rendon, Novack, & Dowell, 2005) has only in the last decade raised questions about currently accepted definitions of student success. Actually, research presented by Kuh et al. (2007) and Reason (2009) are the only comprehensive models that address how factors related to student learning and persistence apply specifically to multiple student demographics. In addition, researchers continue to implore higher education professionals to reexamine gender and racial identity development in order to better understand how it affects under-represented males' academic and social experiences in college (Bridges, 2011; Fleming, 2000; Harper, 2009; Nora & Crisp, 2012). Therefore, as it relates to this study, a review of the research regarding racial

and ethnic identity development in Black, Hispanic, and White college students may inform how some of these complex factors may impact their success.

Minority Identity Development

Many minority identity development models emerged in the late 1970s and expanded on existing models of general identity development (Evans, Forney, Guido, Patton, & Renn, 2010). In 2003, Sue and Sue revised one such model, which serves as a strong basis for understanding the frames and stages of other minority development models discussed in this chapter. The racial and cultural identity development model (RCID) is made up of five stages that explore the psychosocial development of individuals from minority groups (Sue & Sue, 2003).

Sue and Sue's (2003) theory posits that members of minority groups initially conform to negative stereotypes of their racial or ethnic group and resist learning about their cultural heritage. After a singular event or series of triggering events, these individuals begin to question the dominant cultural norms and gain interest in learning more about their racial or ethnic group (Sue & Sue, 2003). In doing so, they begin to reject the dominant culture altogether and immerse themselves in learning about their cultural heritage, which results in the formation of a new identity (Sue & Sue, 2003). This leads to a period of introspection, in which these individuals struggle to define themselves within their own culture and that of the dominant one (Sue & Sue, 2003). Finally, as these individuals continue to explore and articulate their knowledge and experiences, they become more accepting of themselves, appreciate others, and balance their racial or ethnic identity with other aspects of their psychosocial development (Sue & Sue, 2003).

However, this theory is a general theory of minorities and does not accurately articulate the cultural complexities of all racial and ethnic groups. Exploring models that relate

specifically to Black and Hispanic/Latino students may help to further understand factors that may play a role in separating these students' experiences from those of their White counterparts. Therefore, an overview of Cross and Fhagen-Smith's model of Black identity development, Ferdman and Gallegos's model of Latino identity development, and Torres' model of Hispanic identity development is given below, followed by a discussion of how these models may provide insight into informal interactional diversity and student success. An overview of Helms' White identity development model and the concept of White privilege is also discussed.

Black Racial Identity Development

According to Evans et al., (2010), Cross's original theory of psychological nigrescence is the most widely known model of Black identity development. In recent years, Cross and Fhagen-Smith (2001) revised this theory using a life span perspective, which considers racialized experiences during childhood. It is composed six sectors, or phases, that encompass three general patterns of experience. The patterns are: (a) normative, in which Blacks establish their racial identity as a result of interactions with their parents and significant others from birth to adulthood; (b) conversion, in which individuals form a healthy Black identity during adulthood; and (c) nigrescence recycling, which involves the modification of Black identity throughout an adult life span (Cross & Fhagen-Smith, 2001).

Black identity development and student success. Early adulthood represents a potential significant turning point in the identity development of Black individuals. During this phase, previously held notions or understandings of identity may be challenged, which may lead to adult nigrescence, or confirmed through their experiences (Cross & Fhagen-Smith, 2001). For example, individuals, who still harbor feelings of self-hatred or anger based on internalized racism, at this stage must experience a nigrescence conversion pattern in order to establish a

healthy Black identity and race salience. Meanwhile, young adults with low race salience, who still see race as non-essential, may continue to live and interact in environments where their race never has to be acknowledged. However, according to Cross and Fhagen-Smith (2001), these individuals will remain vulnerable to events that may trigger the nigrescence process.

At the same time, those individuals with high-race-salience identities, who clearly value race and Black culture, may not experience nigrescence because they already have a self-concept in which being Black is one of their most prominent values. Alternately, those who have high race salience, but who have not critically reflected on their own thoughts and feelings toward being Black, may experience a process of nigrescence that helps them establish their own sense of blackness. Therefore, Black identity development involves various factors and experiences that can result in forming health or unhealthy racial identities. Understanding the stages of Black adolescence and early adulthood may help student affairs practitioners better facilitate the process of adult nigrescence and potentially improve the success of these students in college.

African American Men

While racial identity theories may provide background for the potential challenges African Americans face in persisting through college, it is also important to recognize the specific factors that promote and hinder Black male success. In a qualitative study of 219 black male students from 42 U.S. colleges and universities, Harper (2012) found six categories related to persistence. Three of those categories were linked to precollege characteristics and three were associated with the college experience. Those connected to the college experience are of specific importance to this study.

Harper (2012) found that transition programs, such as summer bridge programs, allowed Black male students to take introductory courses, identify resources at the institution, and get

acclimated to predominantly White environments before their White peers arrived. More importantly, these programs permitted Black male students access to faculty, administrators, and older same-race students who served as peer mentors. This newly formed social network introduced them to, among other things, engagement opportunities on campus.

Research on Black undergraduate males overwhelmingly points to participation and leadership in student clubs, activities, and organizations on campus as the highest mitigating factor for persistence in college (Barker & Avery, 2012; Harper, 2012). These types of activities impact students' ability to connect to, understand, and navigate the campus environment (Barker & Avery, 2012). According to Harper (2012), Black male student engagement also helps resolve masculine identity conflicts, find peers to support their achievements, develop political savvy for navigating professional settings that are racially under-represented, develop Black identities that foster productive activism at PWIs, acquire social capital for access to academic resources and exclusive networks, overcome previously held notions of educational and socioeconomic disadvantage, and respond productively to racism.

This issue of racism is a common barrier to Black male persistence, and it was the third category in Harper's (2012) study. However, he is not the only scholar to cite this challenge for Black males, particularly those at PWIs. Bridges (2011) found that African American men who were enrolled in PWIs, but who had problem-focused coping strategies, were more resilient. Similarly, Strayhorn (2014) found that grit, or consistent effort toward long-term goals and passion to pursue those goals, positively affected academic outcomes for Black males at PWIs. Yet, more relevant than these findings were the fact that, compared to White peers who typically do not have the same stressor in their college experience, Black males had to have a certain level

of grit to achieve their goals or even use coping mechanisms to handle issues of racism in college.

Hispanic Racial and Ethnic Identity Development

Understanding the complexities of identity development may also provide insight into factors associated with Latino students' success. For example, Pope et al. (2004) found significant connections between racial identity theory and minority students' sense of belonging. Therefore, exploring this connection and how it may relate to social integration, of which a student's sense of belonging is a component, may prove meaningful for Latino or Hispanic student success.

Latino racial identity development. While there are a number of theories regarding ethnic identity development in Hispanic students, few models of racial identity development apply to them. According to Evans et al., (2010), Ferdman and Gallegos offer the best understanding of how Latinos experience race and racism. Before exploring their model of Latino identity development, it may be important to outline three considerations, which they suggest provide a context for it. First, Ferdman and Gallegos (2001) stated that while race is not a primary concern for individuals belonging to this population, they may devalue those with darker skin colors. Second, many Latinos come from mixed backgrounds, which makes it difficult to place them in finite racial categories (Ferdman & Gallegos, 2001). Finally, some Latinos in the United States may classify themselves as White, while others use Latino, Hispanic, Chicano, or various other racial classifications (Ferdman & Gallegos, 2001).

Hispanic identity development. Torres (1999) developed a bicultural orientation model for Hispanic college students in which four cultural orientations emerged. In the bicultural quadrant, individuals demonstrated high levels of both acculturation and ethnic identity,

indicating a preference for both Hispanic and Anglo cultures. Those in the Anglo orientation quadrant showed a high level of acculturation but a low level of ethnic identity development. The Hispanic orientation was categorized by low-level acculturation and high-level ethnic identity development. Finally, individuals who demonstrated low levels of both acculturation and ethnic identity were classified as a marginal orientation.

In 2003, Torres introduced a conceptual model that described the influences of Hispanic ethnic identity through the sophomore year of college. These five influences – origin environment, family influence and generational status, self-perception and status in society, cultural dissonance, and changes in relationships – comprised two over-arching categories called situating identity and influences on change. The ethnic diversity of the environment in which an individual was raised, the acculturation level of that individual's parents, and the individual's perception of privilege in his or her culture impact Latino student ethnic identity status upon entering college. Similarly, positive and negative changes to Latino ethnic identity development are associated with an individual's reaction to differences in his or her culture and what others expect, as well as shifts in interpersonal relationships with peer groups.

Also relevant to this study is the work of Torres and Baxter Magolda (2004) and Torres and Hernandez (2007). The findings in each of these studies suggested that Latino ethnic identity development was connected to the cognitive and interpersonal development of self-authorship. On one hand, cognitive dissonance brought on by stereotyping and cultural oppression may propel these students toward finding and trusting an internal voice, building a personal philosophy, and integrating that philosophy into their everyday lives (Torres & Baxter Magolda, 2004). On the other, creating an informed Latino identity, advocating for others of similar ethnic origin, and integrating a sense of self into a diverse environment may help Latino

individuals continue to develop their identity even when they are confronted with racism or prejudice (Torres & Hernandez, 2007).

Hispanic Men

According to the 2010 U.S. Census, Hispanics make up approximately 16 percent of the overall U.S. population and represent the largest racial and ethnic minority group in the nation. Yet, the statistics for Hispanic persistence in higher education, particularly males, is staggering. Sáenz and Ponjuan (2011) estimate that only 8.4 percent of Hispanics aged 18 to 24 years earn a bachelor's or graduate degree. Only 3.2 percent of that number constitutes Hispanic males, compared to 7.9 percent of all males who earn a degree in that age group. Finally, the percentage of earned bachelors and graduate degrees for Hispanic males peaks at 14.1 percent, or at the 40 to 59 year age group (Sáenz & Ponjuan, 2011). This is compared to 30.2 of males in that same age group.

Research published within the last decade has contributed to understanding how institutions may be able to better serve this population. For example, Torres and Zerquera (2012) conducted an exploratory study of 36 institutions in seven states that could potentially become HSIs by 2020. The authors found that only five were aware of shifting demographics in the surrounding region and created specific programs aimed at transition and community outreach (Torres & Zerquera, 2012). According to Zarate, Sáenz, and Oseguera (2011), social and academic integration are critical factors during a Hispanic student's first year in college, which is a common transition period that can validate or refute his or her college-choice process. This information seems to support Torres' (2003) conceptual model that described the influences of Hispanic ethnic identity through the sophomore year of college.

Also like Torres' conceptual model, the authors suggest that family support and encouragement, high educational aspirations, and social support are factors specific to Hispanic student college persistence (Zarate et al., 2011). Scholars have demonstrated specifically that social support, such as having an identified advisor or mentor (Torres & Hernandez, 2009), produces higher rates of persistence for Latino students. Lastly, Zarate et al. (2011) added that sufficient financial aid was also a significant factor that could help to ease stress related to financing college and familial obligations to send money home.

Identity Development in the Dominant Culture

This study would not be complete without exploring the development of those who comprise dominant culture. It is important to understand how the perceptions of White students, particularly those of White males, change when they interact with people of color. Cabrera (2014b) suggests White males demonstrate the lowest level of support for multiculturalism and racial equality; therefore, they potentially have the most to gain from exposure to racial and ethnic diversity. Similarly, Smith, Senter, and Strachan (2013) indicated that White men demonstrated higher levels of racial resentment than White women, which seemed to be tied to their political ideologies. Therefore, exploring the concept of White identity development and White privilege may provide some insight into issues of campus climate and the challenges students of color may face in social integration on college campuses.

White identity development and privilege. Helms' (1995) theory of White identity development includes two phases: (1) the abandonment of racism and (2) the evolution of a nonracist identity. The first phase occurs when a White person encounters a racial dilemma that forces him or her to acknowledge not only his or her privilege in society, but also his or her involvement in maintaining a racist society. For example, the college environment is the first

exposure for many White students to varying perspectives and events focused on the experiences of different racial and ethnic groups (Cabrera, 2012; Smith et al., 2013).

The second phase involves consistent reflection on racism and the privilege associated with being White, as well as meaningful interaction with and understanding of other races. McIntosh (1986) first described this concept of White privilege as an invisible package or knapsack of unearned assets. Similarly, Wise (2009) defined it as "any advantage, head start, opportunity, or protection from systemic mistreatment, which Whites generally have, but people of color do not have" (p. 116). Privilege, and its association with "whiteness," has been described as inherent in the dominant White culture of the United States. For example, Featherston and Ishibashi (2004) described whiteness as values, laws, and behaviors that are "embedded in historic systems of oppression that sustain wealth, power, and privilege" (p. 105). According to Paone, Malott, and Dwyer (2015), this concept of whiteness is rooted in higher education as well.

Aside from more obvious examples, such as the multitude of buildings and streets named after Whites and the number of White faculty and administrators on campus, compared to the number of non-Whites who staff dining halls and janitorial services, are the more subtle forms of whiteness in the number of White residence life staff who offer programming more reflective of White cultural traditions and norms (Paone, Malott, & Dwyer, 2015). These instances help to create a more hostile campus environment by generating micro-aggressions, a term used to describe subtle degradation. Racial micro-aggressions have been cited in both academic and social spaces within higher education, which will be explored later in this chapter.

White Men

In her qualitative study of 10 White men, Davis (2010) discovered five themes related to socially constructed male identity in college. These themes were: the importance of self-expression, code of communication caveats, fear of femininity, confusion about and distancing from masculinity, and sense of challenge without support. Noticeably absent from the themes was anything related to racial identity; however, still relevant to this discussion may be the ideas of challenge without support and masculinity.

Cabrera (2014b) found that White males viewed affirmative action policies and racially-based organizations as marginalizing them. In addition, Cabrera (2014a) found that White males who were normalizing whiteness believed race was minimally important in contemporary society, held individualized definitions of racism, opposed race-conscious social policies, and claimed no personal responsibility for racial inequality. In both cases, the White men who participated in the study minimized the importance of contemporary racism through feelings of apathy or out-right anger.

In Cabrera's (2014a) study, those White males who felt apathetic about race and racial issues attended a PWI, whereas those who felt angry about race and racial issues attended a more selective, Hispanic-serving institution (HSI). Cabrera (2014a) suggested students at the PWI existed in White environments and did not see their positions threatened by race-conscious social policies. In contrast, those who attended the more selective institution could not escape multiculturalism and perceived policies like affirmative action as threats to their success in the competitive academic environment (Cabrera, 2014a).

Also relevant to the discussion of White men are their perceptions of masculinity. Davis (2010) found that the men she interviewed were uncomfortable reflecting about their status as

men on campus. She hypothesized that this lack of reflection could contribute to their misunderstanding of privilege and inequality (Davis, 2010). These perceptions were echoed in Cabrera's (2011) findings, which demonstrated that White male undergraduates supported the hierarchical status quo more than their peers and were more resistant to changing their racial ideologies in their first year. Inherent in this finding is the fact that White men benefit from both White privilege and male privilege.

Informal Interactional Diversity

According to Gruin (1999), informal interactional diversity is defined as "the opportunity to interact with students from diverse backgrounds in the broad, campus environment" (Gruin, 1999, para. 4). This involves making connections and developing relationships with peers and faculty from diverse racial, ethnical, social, and economic backgrounds (Gruin, 1999, para. 4). Antonio (2001) further investigated the concept of interactional diversity at UCLA by studying the extent to which a student's closest friendships reflected racial division on campus.

More specifically, he assessed the influence of friendship-group characteristics on outcomes of interracial interaction, promoting racial understanding, and cultural awareness. Antonio (2001) determined that racial diversity in the friendship group helped to increase support for racial understanding and interracial interaction outside the friendship group. Therefore, exposure to issues of racism and cultural difference, which students may encounter in the organizational structure of a university, within the campus climate, and when participating in co-curricular activities, influenced the students' understanding of others and their student-student interactions. Using this same student sample in a later study, Antonio (2004) found evidence that interracial interpersonal relationships influenced academically related cognitive outcomes; however, the reason for this was unclear. Of particular interest to this study may be the finding

that friendship-group diversity was positively correlated with intellectual self-confidence for students of color, but negatively correlated with intellectual self-confidence for White students (Antonio, 2004). Similarly, Strayhorn (2010b) used the CSEQ to measure the influence of interactional diversity on self-reported gains and found that socializing with diverse peers affects African American college students' self-perceptions of learning and personal development.

Therefore, informal interactional diversity, which includes components of social integration and co-curricular dialogue, appears to impact student success. More precisely, co-curricular activities, particularly those tied to leadership for Black males, mentoring for Hispanic males, and diversity education for White males, as well as organizational structure and campus climate, contribute to social integration. Similarly, pedagogical approaches outside the classroom and access to faculty, particularly those of a similar race, effect co-curricular dialogue.

Social Integration

As mentioned before, Tinto (1993) posited that the formation of new social networks contributed to student satisfaction, persistence, and students' overall college experience. These social networks include the interpersonal relationships students build with faculty, staff, peers, and mentors during college (Tinto, 1993). Therefore, social integration offers many opportunities for informal interactional diversity. However, many studies have sought to validate or refute the applicability of the social integration construct in Tinto's (1993) departure theory to historically under-represented students.

Some scholars suggest Tinto's (1993) theory assumes minority students must assimilate into a dominant culture and ignores the importance of family and past communities to minority student success (Cabrera et al., 1999; Guiffrida, 2006; Rendón, 1994; Tierney, 1992; Zarate, Sáenz, & Oseguera, 2011). For example, Yosso, Smith, Ceja, and Solórzano (2009) suggested that Latinos engaged in stages of rejection through racial micro-aggressions, which promoted

stronger community building and navigation through different communities, such as family and school. These three stages were very different from Tinto's (1993) separation, transition, and incorporation.

Others, such as Kelly (2008) found that social transition to college for students, who were identified as both minorities and at-risk, was impacted by the type of friendships those students developed with others on campus. For example, finding peers who were highly academically motivated had a positive effect, while socializing with those who were less academically motivated had a negative effect. Finally, Henningsen (2003) suggested that social integration may be statistically significant to students at community colleges with a wide range of social activities. According to Mullin (2011), "community colleges have historically enrolled approximately half of all undergraduate students of color" (p. 7). However, in her qualitative study of 26 Hispanic students at two community colleges, Holland (2011) found that academic integration and family support was more important for continuing enrollment than social integration.

Regardless of how the social integration construct is applied to minority students, one key factor is consistent: the need for social support networks. According to Tinto (1993) student involvement, an institution's organizational structure and size, and the campus climate can also contribute to the formation and destruction of these social networks.

Co-curricular activities. After comparing relationships between academically-related needs and subsequent college experience, Barker (2001) found that first-year African American students reported being less satisfied with their college choice than their White peers even though they were more involved in student activities. As a result, the author concluded that the quality and content of African American students' experiences in college may be more telling

than merely participating in activities (Barker, 2001). Further research seems to support this reasoning. Joining a Black student organization on campus has proven to be a contributing factor in both sense of belonging and persistence for African American students, particularly at PWIs (Guiffrida & Douthit, 2010). Additionally, obtaining a leadership position in one of these organizations has been linked specifically African American male persistence and success (Barker & Avery, 2012).

The role of ethnic student organizations in creating supportive subcultures for Hispanics and Blacks was echoed in studies by Gonzalez (2002) and Museus (2008). In a qualitative, two-year long study of two Latino students, Gonzalez (2002) noted the importance of an ethnic student organization for providing necessary sociocultural associations. Similarly, Museus' (2008) qualitative study of 12 African American and 12 Asian American students found that participation in these types of organizations facilitated cultural adjustment by serving as a source of familiarity, a vehicle for expression and advocacy, and a place for cultural validation. Finally, several college-level programs, such as Lambda Upsilon Lambda Latino at Cornell University, Project Mentoring to Achieve Latino Educational Success (Project MALES) at University of Texas at Austin, and Doorway to Success: Latino Male Retention Initiative at Monroe County Community College, were identified as innovative programs that provide necessary emotional and structural support for Latinos transitioning from high school to college (Sáenz, & Oseguera, 2011).

For White students, taking courses and attending events focused on minority groups appear to influence racial attitudes and learning (Astin, 1993b; Smith, Senter, & Stracham, 2013). For example, Smith et al., (2013) determined that classes focused on minority groups and participation in racial or cultural awareness workshops were associated with lower levels of

racial resentment for White males. Whitt, Edison, Pascarella, Terenzini, and Nora (2001) presented similar findings in their investigation of openness to diversity and the CSEQ; however, the results indicated the correlation was stronger in the second and third year of college. In addition, Astin (1993b) demonstrated that diversity-related activities were positive correlated with self-reported cognitive gains and increased commitment to racial understanding.

Organizational structure. According to Reason (2009), research related to the effect of structural-demographic features, such as public versus private institutions, institutional size, curricular mission, and admissions selectivity, is mixed. While size, mission, and institution type (public versus private) have been shown to have little effect on student persistence, attending more selective, historically Black colleges and universities (HBCUs), Hispanic serving institutions (HSIs), women's universities, and predominantly White institutions (PWIs) has been found to have an impact. Some research has suggested that African American students who attend HBCUs demonstrate better academic performance, higher graduation rates, and higher occupational aspirations, compared with those of their African American counterparts at PWIs (Flowers, 2003; Kugelmass & Ready, 2010; Price, Spriggs, & Swinton, 2011).

However, other research has found a different result. In an analysis of 3,579 respondents to the CSEQ from 1990 - 2000, Marie de la Rosa (2002) found that African American students at Selective Liberal Arts colleges were more satisfied with their college experience than their peers at HBCUs. In addition, Latino students indicated they were less satisfied with their college experience at HSIs than their counterparts at Selective and General Liberal Arts colleges, private PWIs, and HBCUs.

Marie de la Rosa (2002) posited that one reason for the discrepancy between her findings and the literature was diversity. In her statistical analysis, the openness to diversity scale had the

strongest influence on students' estimate of gains, which suggested that more exposure to diverse environments increased the likelihood of a satisfying college experience. Yet, African American students as HSIs were found to have less satisfaction with their college experience, but they had a positive correlation with the openness to diversity scale. Marie de la Rosa (2002) suggests these students may have chosen to attend HSIs because of the high concentration of Latinos with whom they could share similar concerns.

Campus climate/environment. Campus climate or campus racial climate has roots in an institution's legacy of inclusion or exclusion (Hurtado, 1992). For example, PWIs that have a history of limited access and legal pressure to accept students from diverse backgrounds seemingly convey messages of resistance to under-represented populations. Meanwhile, HBCUs and American Indian colleges (ACIs) that were created to serve these populations often have a mission, strategic goals, a student body, and faculty that reflect cultural and academic values specific to individuals from diverse racial and ethnic backgrounds (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998). These historical differences create an underlying tension or unity that can affect student satisfaction on campus (Astin, 1993b). For example, Solórzano, Ceja, and Yosso (2000) found that micro-aggressions, particularly those from campus police units, created a negative racial climate for African American students and prompt the creation of social "counter-spaces" (p. 70) on and off campus. In addition, perceptions of campus climate has also been found to directly affect levels of faculty satisfaction (Victorino, Nylund-Gibson, & Conley, 2013). Therefore, the extent to which a campus environment gives priority to issues of diversity and promotes or suppresses a sense of belonging helps define the concept of campus climate.

According to Hurtado et al. (1998), campus climate is a product of four dimensions: 1) the original mission of an institution and the degree to which it reflects the inclusion or exclusion

of certain races, 2) the percentage of various racial and ethnic groups represented on campus, 3) the psychological perceptions and attitudes between and among groups on campus, and 4) intergroup relations on campus. This framework demonstrates the complex nature of campus climate. It involves much more than desegregating institutions by increasing the number of minorities. In fact, some scholars suggest that merely admitting more minorities without providing intentional opportunities for in-class and out-of-the-classroom interaction, or without offering support and encouragement, can lead to more racial tension and less student satisfaction (Cabrera et al., 1999; Park, 2009).

For Black students, campus climate may be a more important measure of student satisfaction. After analyzing survey responses from 219 undergraduates at a private, highly-selective research university in the Mid-Atlantic region of the United States, Spaid (2013) concluded that, compared to White, Hispanic, or Asian students, Black students believed campus climate (feeling welcome, a strong institutional commitment to diversity, fair student disciplinary procedures, and campus safety and security) was most important to institutional commitment. These students also ranked campus climate as the area with which they were most satisfied at that specific institution, which appears to support Marie de la Rosa's (2002) finding that Black students at selective liberal arts colleges tend to be more satisfied with their college experience. Similarly, Taylor's (2004) study of 96 African American students at the University of Nevada Reno and University of Nevada Las Vegas found that campus climate was a significant factor in their ability to persist. However, students in her qualitative study stated both campuses were "unwelcoming" (Taylor, 2004, p. 129) and that they were not wanted, "but were instead tolerated" (Taylor, 2004, p. 129).

Stereotype threat is also an area related to the psychological dimension of campus climate, which recent scholars have explored. According to Steele and Aronson (1995), stereotype threat is defined as the risk of confirming a negative stereotype about one's group by either having features that conform to it or behaving in a way that validates it. This phenomenon has been studied in both secondary and higher education settings.

In their qualitative study of high school students at Capital High in Washington, D.C., Fordham and Ogbu (1986) found that various behaviors, such as speaking standard English, spending time in the library studying, working hard to get good grades in school, and getting good grades in school, were identified as "acting white" (p. 186) and were deemed unacceptable by a large number of African American students. Davis (2011) found that African American students in higher education encountered stereotypes related to athletic ability, expectations of dress, and classroom performance that affected their ability to trust others and participate in class discussions. These findings seem to validate those of Solózano et al. (2000), in which African American students perceived micro-aggressions in the classroom, such as negative faculty and peer expectations of academic performance and study group formation, as contributing to a more negative campus racial climate.

Howard (2011) also found that Black, Latino, and Asian students' academic performance was negatively affected by exposure to stereotype threat. However, stereotype threat may not be limited to under-represented populations. Nichols' (2009) study of students at Pennsylvania State University found that campus racism can cause White students to experience stereotype threat. More specifically, he discovered that White students who experienced the threat of being racist perceived others as segregationists; however, these students also increased their beliefs in the appreciation and tolerance of other cultures and values.

Co-curricular Dialogue

As defined earlier, co-curricular dialogue is informal interpersonal dialogue or conversation related to intellectual and cultural topics concerning values and social issues (Pace, 1984). Examples of instances in which co-curricular dialogue occurs include discussions regarding politics, religion, social issues, or culture with peers and faculty outside the classroom, as well as time spent socializing with peers in different cultural contexts, such as attending religious services, other culture-specific activities, or engaging in activism. Some scholars suggest these types of experiences and meaningful discussions with diverse peers and faculty members have a significant general effect on cognitive skills and continued learning (Seifert, Gillig, Hanson, Pascarella, & Blaich, 2014).

Astin's (1993a) longitudinal study of 25,000 student surveys from more than 200 four-year colleges and universities in the United States found that the most significant impact on student achievement and development is the frequency and quality of student-student and faculty-student interaction. More specifically, he suggested that peer groups were the most powerful source of influence on growth and development during the undergraduate years. His pioneering study on the benefits of student involvement concluded that student-student interactions were directly related to a myriad of benefits, including improved GPA, increased analytical and problem-solving skills, advanced leadership ability, better public speaking and interpersonal skills, more preparation for graduate and professional school, and general knowledge. In addition, both Astin (1993b) and Villaplando (1994) found that socializing across racial lines and participating in discussions of racial issues contributed to students' academic development and personal development, satisfaction with college, and level of cultural awareness, regardless of their racial background.

Pascarella and Terenzini (1991) also determined a student's college experience was most affected by peer influence, facilities used, and experiences provided by the institution. In addition, Pascarella and Terenzini (1991) found that persistence was highly influenced by, among other things, a peer culture in which students develop close on-campus friendships with both students and faculty. Kelly's (2008) conclusion that transition to college for first-year at-risk and minority students is impacted by friendships with highly academically motivated peers reinforces this premise.

Astin's (1993a) study also found that, second to peer groups, student-faculty interaction influenced students' undergraduate development. These measures included being a guest in a professor's home, working on a professor's research project, and meeting with faculty during office hours or in other circumstances outside of the classroom (Astin, 1993a). Student-faculty interaction was also found to have a similar impact on GPA and self-reported intellectual and personal growth, compared to the influence of peer groups. Finally, the student-faculty relationship appeared to influence ideas on racial understanding, protecting the environment, and scientific discovery (Astin, 1993a). As a result, pedagogical approaches and academic support or climate and their relation to co-curricular dialogue and informal interactional diversity will be discussed.

Pedagogical approaches outside the classroom. Informal faculty interaction has been positively correlated with student learning, satisfaction, and persistence (Astin, 1993a; Kuh et al., 2007). It has also been shown to have a significant and positive effect on openness to diversity and challenge for men (Whitt et al., 2001). Examples of activities that were particularly beneficial to African American student persistence at PWIs and HBCUs were being invited to a faculty member's home, engaging students in mentoring activities, and contact with advisors (as

cited in Kuh et al., 2007). Related interactions that encouraged strong relationship building with faculty and staff also seemed to increase Latino students' sense of belonging and feelings connected to mattering (Dayton, Gonzalez-Vasquez, Martinez, and Plum, 2004). For example, Hispanic students who attended two community colleges in Maryland reported that being able to email professors for follow up questions after class contributed to the fact that they were still enrolled (Holland, 2011).

Academic support/climate. O'Meara and Braskamp (2005) surveyed 729 Chief Academic Officers (CAOs) from nonprofit four-year colleges and universities to determine the current demands of faculty. They discovered activities that encourage faculty-student interaction, such as teaching and engagement/professorial service and service to the institution, are increasingly weighted more in the tenure review processes; however, research (grant-making and coordination) and number of scholarly publications continues to be the most significant piece of the entire tenure portfolio (O'Meara & Braskamp, 2005). As a result, expectations of faculty are high and activities that promote positive faculty-student interaction, such as being involved in living-learning communities and mentoring, are considered extra components to their workload that cannot be accomplished.

There is some research that discussed how White male faculty members and administrators made intentional efforts to become social justice allies, defined by Patton and Bondi (2015) as working "for social justice from positions of dominance" (p. 489). In their qualitative study of 12 participants, Patton and Bondi (2012) found that research, teaching, advising and mentoring students, advocating during hiring practices, and speaking out against institutional policies were ways in which the men in their study engaged in social justice practices. These practices were only at the individual level, suggesting larger issues at the

university level were left ignored. This is a problem others have argued needs to be addressed, by those in power and with the support of racially diverse members of the campus community (Paone et al., 2015). Still, some argue that well-intentioned White males who seek to be social allies must also be cognizant of the perceived power dynamic inherent in racial social structures. Therefore, the idea of *helping* (emphasis added) others may only serve to perpetuate the micro-aggressive cycle.

Results on how much student-faculty interaction and academic climate effect undergraduate minority students is mixed. For example, Cole (2010) examined the effects of student-faculty interactions on 2,037 African American, Asian American, and Latino students' academic achievement, as measured by grade point average. Using data from the CSEQ, Cole (2010) found that student-faculty interactions were not significantly related to Latino students' GPA, while African American students' GPA was most affected by interactions with peers and faculty members. Furthermore, course-related faculty contact was negatively correlated to African American students' GPA and all minority students' academic performance was negatively affected by advice and criticism from faculty, mainly regarding the adequacy or quality of academic work.

Yet, Holland (2011) found that Hispanic students who attended community colleges were more likely to work closely with faculty and relied heavily on their guidance and support in order to succeed. For example, one faculty member videotaped class for a student who had to work and other faculty persuaded students to use the tutoring center resources so they could pass their class (Howard, 2011). This study also found that two primary barriers to Hispanic students in earning their degrees were finances and work schedules (Holland, 2011). Therefore, supportive faculty who can lead students to appropriate resources, such as financial aid, and accommodate

student work schedules, like the one who videotaped class, may help these students succeed in their educational goals.

Similarly, Strayhorn (2008) and Hylton (2013) found a statistically significant relationship between student-faculty interaction and college satisfaction for Black males, even after controlling for various background variables, such as marital status, level of parental education, classification, age, and aspirations. Strayhorn (2008) suggested that these findings may be beneficial for academic advisors in understanding the role they play in facilitating success for Black men.

Indeed, in her study of 896 student responses to the Student Satisfaction Inventory (SSI), Ferguson-Russell (2000) found that academic advising was ranked second by all students among the most important factors to their satisfaction with the university. Even more, African American and Hispanic students noted that it was more important that their advisors help them with personal problems and campus resources (Ferguson-Russell, 2000). Since Ferguson-Russell's (2000) analysis demonstrated that helping with personal problems and campus resources was only somewhat important to Asian and White students, she posited those needs for African Americans and Hispanics may be attributed to feelings of marginalization on campus.

Summary

Student success is a concept that many researchers still struggle to define. Yet, all scholars agree that this concept is important to higher education and the primary goal of all students. The growing diversity of the student body is connected to this concept of student success. Many of the factors related to student success, such as social integration and co-curricular dialogue, are intrinsically tied to informal interactional diversity. For example, positive campus and academic climates have been shown to increase student success, but these

factors are inherently impacted by interactions between students from different backgrounds. In addition, organizational structure, such as institution type, and pedagogical approaches outside the classroom appear to influence the success of historically under-represented students. Finally, the co-curricular activities that impact student success for undergraduate males differ by ethnicity or race.

While student identity development models for Blacks, Hispanics, and Whites are relevant, they are not the focus of this study. Further evidence has suggested that other factors, such as those associated with informal interactional diversity, may be different for these populations. For this reason, understanding the relationships that may or may not exist between these factors and the engagement of Black, Hispanic, and White males in the undergraduate experience may add to the growing body of literature on student success for these populations. The next chapter outlines the methods this study utilized to investigate these possible relationships.

CHAPTER 3

Methods

Research Design, Population, and Sample

This was a quantitative study of a secondary data set, which was obtained from the Center of Postsecondary Research and Planning's National Survey of Student Engagement (NSSE) Institute. College students who were enrolled at large, public predominantly White institutions (PWIs) and participated in the administration of the NSSE from 2013 – 2014 were participants in this research investigation. In the context of this study, PWIs were defined as institutions of higher learning that had a student diversity profile composite of more than 50 percent Whites. More specifically, the researcher collected a purposeful sample of surveys completed by undergraduate students who indicated they were male and Black or African American, Hispanic or Latino, or White.

The data collected produced a sample of student respondents to the NSSE from PWIs with enrollments of 20,000 students or more in order to explore more fully the experiences of undergraduate males at these types of institutions. Although Reason (2009) states measures of organizational behavior and culture may be better predictors of continued enrollment than institutional characteristics, he cites an exception for African American students. Research shows African American students who attend historically Black colleges or universities (HBCUs) have an advantage over similar students at PWIs (Reason, 2009). Likewise, the perceived campus climate at PWIs has been shown to have negative effects on Hispanic/Latino students who attend these institutions (Reason, 2009).

In addition, the researcher used students from large, public colleges and universities. Again, while structural-demographic institutional characteristics like sources of support (public

versus private) and size may not be variables that significantly affect a student's desire to remain enrolled at an institution, Hu and Kuh (2003) suggest that the nature of the environment and resources available at larger public universities is different from those at smaller private institutions. This suggests that student experiences at these types of institutions would also be different. Similarly, issues of continued enrollment at larger publics seem to be greater when compared to smaller private schools (Reason, 2009).

Variables

This study was an examination of three specific variables within the NSSE. These were: classification in college, levels of informal interactional diversity, and student engagement in areas related to academic challenge, learning with peers, experiences with faculty, and campus environment. Classification in college is the categorical rank of a student based on his or her number of earned credits. Students who took the NSSE were provided with five responses and asked to choose one. These responses were listed as freshman/first-year, sophomore, junior, senior, or unclassified. The responses investigated in this study were limited to freshman/first-year, sophomore, junior, and senior students, as the population studied was undergraduates. Levels of informal interactional diversity were measured by the Experience with Diverse Perspective topical module, which represented a combination of items dealing with student experiences with diversity on campus, as reported on the NSSE ("NSSE Topical Modules", 2017).

The Experiences with Diverse Perspectives topical module was one of nine optional supplemental tools that institutions distributing NSSE could append. Each module was designed as short sets of questions on specific topics, including academic advising, civic engagement, the development of transferable skills, experiences with diverse perspectives, learning with

technology, and experiences with writing (NSSE, 2017). Participants were asked to respond to questions associated with the frequency with which they engaged in certain activities at their institution, as well as to questions associated with the frequency to which they engaged in conversations with others outside the classroom during the school year. Options were coded as 4=Very Much, 3=Quite A Bit, 2=Some, or 1=Very Little or 4=Very Often, 3=Often, 2=Sometimes, or 1=Never.

Figure 3.1 Experiences with Diverse Perspectives Coding

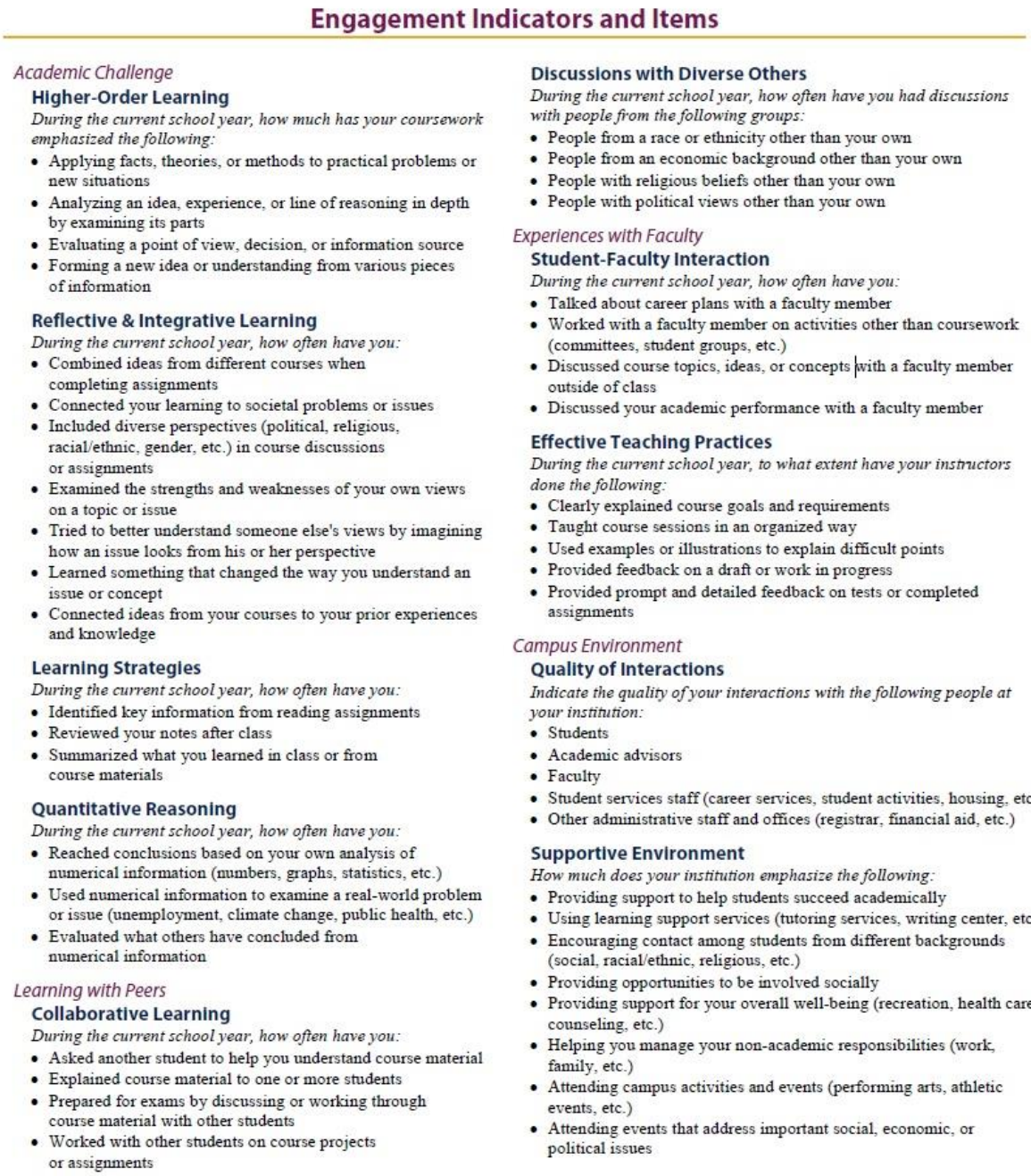
Item wording or description	*Variable name*	*Values*[c]	*Response options*	*Count*	*%*	*Count*	*%*	*Mean*	*Mean*	*Effect size*[d]
1. During the current school year, to what extent have events or activities *offered at your institution* emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.)?										
	DIV01	1	Very little							
		2	Some							
		3	Quite a bit							
		4	Very much							
			Total							
2. During the current school year, about how often have you *attended* events or activities that encouraged you to examine your understanding of the following?										
a. Economic or social inequality	DIV02a	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
b. Issues of race, ethnicity, or nationality	DIV02b	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
c. Religious or philosophical differences	DIV02c	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
d. Different political viewpoints	DIV02d	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
e. Issues of gender or sexual orientation	DIV02e	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							

Item wording or description	Variable name	Values[c]	Response options	Count	%	Count	%	Mean	Mean	Effect size[d]
3. During the current school year, about how often have you had *discussions about* the following?										
a. Economic or social inequality	DIV03a	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
b. Issues of race, ethnicity, or nationality	DIV03b	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
c. Religious or philosophical differences	DIV03c	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
d. Different political viewpoints	DIV03d	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							
e. Issues of gender or sexual orientation	DIV03e	1	Never							
		2	Sometimes							
		3	Often							
		4	Very often							
			Total							

[*Figure 3.1.* Experiences with diverse perspectives coding provided by the NSSE, 2017. This figure demonstrates how questions on the Experiences with Diverse Perspectives Topical Module are coded on the NSSE.]

In this study, student engagement was explored as a multi-dimensional measure of holistic development and added value in the college student experience. The researcher used the 10 Engagement Indicator (EI) summary measures, which were based on a total of 47 survey questions and organized into four broad themes. These were categorized by indicators, such as higher-order learning, reflective and integrative learning, learning strategies, quantitative reasoning, collaborative learning, and discussion with diverse others, student-faculty interaction, effective teaching practices, quality of interactions, and supportive environment. Each EI was scored on a 60-point scale with response options coded as 60=Very Often, 40=Often, 20=Sometimes, or 0=Never. The questions were designed to measure the extent to which students believe they engaged in the ten areas specified above (see Figure 3.2 below).

Figure 3.2 Engagement Indicators and Items



Engagement Indicators and Items

Academic Challenge

Higher-Order Learning

During the current school year, how much has your coursework emphasized the following:

- Applying facts, theories, or methods to practical problems or new situations
- Analyzing an idea, experience, or line of reasoning in depth by examining its parts
- Evaluating a point of view, decision, or information source
- Forming a new idea or understanding from various pieces of information

Reflective & Integrative Learning

During the current school year, how often have you:

- Combined ideas from different courses when completing assignments
- Connected your learning to societal problems or issues
- Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
- Examined the strengths and weaknesses of your own views on a topic or issue
- Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Learned something that changed the way you understand an issue or concept
- Connected ideas from your courses to your prior experiences and knowledge

Learning Strategies

During the current school year, how often have you:

- Identified key information from reading assignments
- Reviewed your notes after class
- Summarized what you learned in class or from course materials

Quantitative Reasoning

During the current school year, how often have you:

- Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)
- Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)
- Evaluated what others have concluded from numerical information

Learning with Peers

Collaborative Learning

During the current school year, how often have you:

- Asked another student to help you understand course material
- Explained course material to one or more students
- Prepared for exams by discussing or working through course material with other students
- Worked with other students on course projects or assignments

Discussions with Diverse Others

During the current school year, how often have you had discussions with people from the following groups:

- People from a race or ethnicity other than your own
- People from an economic background other than your own
- People with religious beliefs other than your own
- People with political views other than your own

Experiences with Faculty

Student-Faculty Interaction

During the current school year, how often have you:

- Talked about career plans with a faculty member
- Worked with a faculty member on activities other than coursework (committees, student groups, etc.)
- Discussed course topics, ideas, or concepts with a faculty member outside of class
- Discussed your academic performance with a faculty member

Effective Teaching Practices

During the current school year, to what extent have your instructors done the following:

- Clearly explained course goals and requirements
- Taught course sessions in an organized way
- Used examples or illustrations to explain difficult points
- Provided feedback on a draft or work in progress
- Provided prompt and detailed feedback on tests or completed assignments

Campus Environment

Quality of Interactions

Indicate the quality of your interactions with the following people at your institution:

- Students
- Academic advisors
- Faculty
- Student services staff (career services, student activities, housing, etc.)
- Other administrative staff and offices (registrar, financial aid, etc.)

Supportive Environment

How much does your institution emphasize the following:

- Providing support to help students succeed academically
- Using learning support services (tutoring services, writing center, etc.)
- Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)
- Providing opportunities to be involved socially
- Providing support for your overall well-being (recreation, health care, counseling, etc.)
- Helping you manage your non-academic responsibilities (work, family, etc.)
- Attending campus activities and events (performing arts, athletic events, etc.)
- Attending events that address important social, economic, or political issues

[*Figure 3.2.* Engagement indicators and items provided by the NSSE, 2017. This figure illustrates the 10 EIs, the corresponding theme, and the corresponding questions from the National Survey of Student Engagement (NSSE).]

Finally, gender and race/ethnicity were included as variables for identifying the specific sample studied. Students who took the NSSE were given four categorical options for gender:

man, woman, another gender identity, or prefer not to respond. Only those students who indicated man were used in this study. Similarly, students were given eight possible responses for race/ethnicity: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, White, and Other. Students were also offered a preference not to respond. Only participants who indicated Black or African American, Hispanic or Latino, and White were included in this study.

NSSE Instrument

Peter Ewell led a team that developed the NSSE instrument in 1998. It was nationally administered in 2000 with 276 fee-paying colleges and universities (Kuh, 2008). According to the NSSE (2017), over 1,600 institutions have participated in the instrument's administration since 2000, with 560 institutions participating in NSSE 2016. Many of the original NSSE survey questions were derived from the College Student Experience Questionnaire (CSEQ), which was developed by C. Robert Pace in 1979, and revised in 1983 and 1990 before its fourth and final edition was published in 1998. The NSSE replaced the CSEQ when it was discontinued in 2014 ("CESQ survey operation to close after spring 2014", 2014).

The NSSE was originally offered in two formats: paper and web-based, which helped to control the cost of administering the survey (Kuh, 2008). The paper format was four pages. The web-based version was composed of five sections. Both versions took approximately 12 minutes to complete. In 2016, a third format, a mobile-friendly application, was offered to participants.

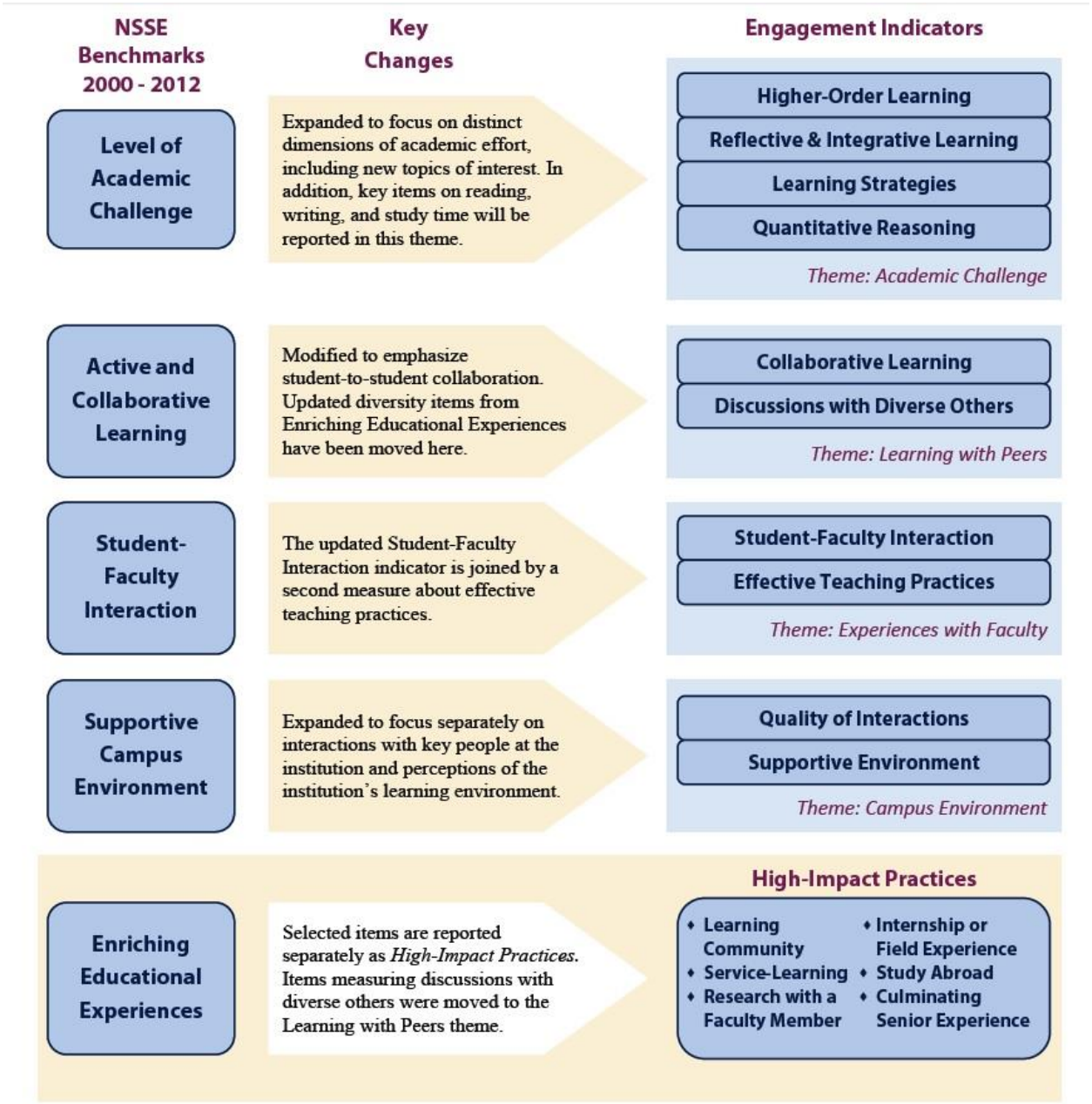
The original 60-item survey captured information about student demographic background and asked questions related to the five benchmarks of effective educational practice: level of academic challenge, active and collaborative learning, student interactions with faculty members, enriching educational experiences, and supportive campus environment (Kuh, 2001). The

benchmarks served three important purposes: 1) to provide high-quality data for improving the undergraduate experiences across institutions, 2) to explore and document effective best practices in higher education, and 3) to public report and compare the quality of the student experience (Kuh, 2001; Kuh, 2008). In 2013, the instrument was reduced to 47 items and institutions were given the opportunity to append topical modules, or short sets of questions on designated topics like civic engagement, academic advising, and experiences with diverse perspectives.

Items within the Engagement Indicators (EIs) and Experiences with Diverse Perspectives Topical Module were examined in this study. More specifically, this research analyzed EIs on screens one through 12 of the web-based instrument. In addition, it examined student engagement in activities that promoted greater understanding of others and societal differences, which were found on instruments with the appropriate appended topical module.

In 2013, the NSSE instrument adapted four themes, organized into 10 EIs, from the five benchmarks of effective educational practices (see Figure 3.3 below). Level of academic challenge was converted into the academic challenge theme and contained four EIs: higher-order learning, reflective and integrative learning, learning strategies, and quantitative reasoning. Active and collaborative learning became the learning with peers theme and contained two EIs: collaborative learning and discussions with diverse others. Student-faculty interaction was modified to the experiences with faculty theme and included the student-faculty interaction and effective teaching practices EIs. Supportive campus environments was altered to the campus environment theme and included the quality of interactions and supportive environment EIs. Finally, the enriching educational experiences benchmark was adapted to six high-impact practices, which were reported separate from the EIs.

Figure 3.3 Benchmarks to Engagement Indicators and High-Impact Practices



[*Figure 3.3.* Benchmarks to engagement indicators and high-impact practices provided by the NSSE, 2017. This figure illustrates how the 10 EIs and corresponding themes were derived from the benchmarks of effective educational practice.]

According to the NSSE (2016), the Experiences with Diverse Perspectives topical module was designed to complement questions on the core survey about student experiences

with others from different cultures and backgrounds. As previously mentioned, this was an optional short survey, added in 2013, which institutions could offer to gain additional student information on a designated topic. Thirty seven US institutions appended the 11-item module in 2016 (see Figure 3.4 below).

Figure 3.4 Experiences with Diverse Perspectives Topical Module 2016

	Institutions			Students		
	Diverse Persp. Module (%)	NSSE 2016 (%)	U.S.[b] (%)	Diverse Persp. Module (%)	NSSE 2016 (%)	U.S.[b] (%)
Carnegie Basic Classification[c]						
R1: Doctoral Universities - Highest research activity	14	5	7	47	18	24
R2: Doctoral Universities - Higher research activity	8	9	6	10	16	16
R3: Doctoral Universities - Moderate research activity	11	8	6	8	15	7
M1: Master's Colleges and Universities - Larger programs	24	28	25	15	27	31
M2: Master's Colleges and Universities - Medium programs	11	13	11	8	8	7
M3: Master's Colleges and Universities - Smaller programs	3	7	7	1	4	3
Baccalaureate Colleges: Arts & Sciences Focus	22	15	17	8	7	5
Baccalaureate Colleges: Diverse Fields	8	15	22	2	6	7
Control						
Public	41	42	34	69	61	66
Private	59	58	66	31	39	34
Undergraduate enrollment						
Fewer than 1,000	5	12	20	1	3	2
1,000 – 2,499	41	34	33	15	15	10
2,500 – 4,999	19	19	18	12	13	12
5,000 – 9,999	14	17	14	12	20	19
10,000 – 19,999	14	12	9	27	25	24
20,000 or more	8	6	6	32	24	34

a. All numbers are unweighted and based on U.S. postsecondary institutions that award bachelor's degrees and belong to one of the eight Carnegie Classification categories in the table. Totals may not sum to 100% due to rounding.

b. U.S. percentages are based on the 2014 IPEDS Institutional Characteristics file.

c. For information on the Carnegie Foundation's Basic Classification, see **carnegieclassifications.iu.edu**

[*Figure 3.4.* Experiences with diverse perspectives topical module 2016, provided by the NSSE, 2017. This figure shows the most recent information related to the type and scope of the institutions that appended the topical module.]

Reliability. According to Johnson and Christensen (2012), reliability in psychological and educational testing refers to the consistency of a set of test scores. More specifically, the

scores obtained from replicated tests of data will be similar. Likewise, internal consistency is a term used to describe how consistently items on a test measure a single construct (Johnson & Christensen, 2012). Cronbach's alpha gives a statistical representation that indicates the degree to which items are interrelated, and is one way internal consistency is measured. According to Johnson and Christensen (2012), this measure should be greater than or equal to .70 for research purposes. The NSSE EI scale alphas ranged between .77 and .90 for 2013; .76 and .90 for 2014; .78 and .91 for 2015; and .76 and .90 for 2016 (NSSE, 2017). Therefore, the NSSE's measure of the quality of a student's engagement with his or her institution is reliable.

Validity. According to Johnson and Christensen (2012), validity is defined as the appropriateness of the interpretations, inferences, and actions researchers make based on test scores. In general, scores are valid if they represent what they are purported to represent. Content validity and construct validity are two forms of validity related to the NSSE.

Items within a scale must embody the domain of interest in order to demonstrate content validity, which is determined by content experts (Johnson & Christensen, 2012). In this process, researchers define the content they want to represent, such as academic challenge, learning with peers, experiences with faculty, and campus environment. Then, they determine whether the items in a scale adequately represent that content. According to Kuh (2008), NSSE items must represent the behaviors, perceptions, and self-assessments related to the intended learning and development outcomes of college students, as well as institutional actions and requirements in place to help students achieve their goals.

Miller, Sarraf, Dumford, and Rocconi (2014) performed a factor analysis of the EIs to demonstrate evidence of construct validity. A factor analysis procedure analyzes correlations among items in order to determine whether a test is unidimensional, or if all of the items measure

a single construct (Johnson & Christensen, 2012). According to Miller et al., (2014), both an exploratory factor analysis and a confirmatory factor analysis test of the EIs met this criterion.

According to Ary, Jacobs, Razavieh, and Sorensen (2006), tests of construct validity measure the extent to which a psychological construct like motivation is accurate. Researchers gather construct-related evidence using different strategies, such as the known-groups technique, intercorrelations among items, or studying the response process of individuals taking the test. Threats to this type of validity include inadequate explanation of constructs, manipulation of the construct, poor measures of the construct, participants' reaction to the situation, and researcher expectations (Ary, Jacobs, Razavieh, & Sorensen, 2006). However, according to Miller et al. (2014), scholars have reported multiple patterns of highly correlated items and constructs on the EIs.

Data Collection Procedures

Approximately 1,600 institutions in the United States and Canada utilized the NSSE from 2000, when it was first administered, to 2017, when this study was conducted. Institutions of higher education that participate in the administration of the NSSE must abide by Institutional Participation Agreement provided by the NSSE. The terms of this agreement are such that: 1) participating institutions follow IRB conditions for recruiting and protecting study participants, 2) participating institutions pay for NSSE based on total undergraduate enrollment and within 30 days of receipt of invoice, and 3) participating institutions understand NSSE's commitment to keeping institutional results confidential. Participating institutions recruited students using approved recruiting messages from the Indiana University Bloomington Institutional Review Board and were limited to seven direct contacts (NSSE, 2017). Promotion of the NSSE survey on participating institution campuses was limited to IRB guidelines and may or may not have

included incentives; however, incentives must have been approved and student participation must have been promoted as voluntary (NSSE, 2017). Participating institutions provided NSSE with personal information concerning their students, which included first and last name, institutional ID number, mailing address or email address, class level, enrollment status, sex, and first-time or first-year student status. However, as part of the terms, NSSE agreed to destroy personally identifiable information within five years of completion of the survey. For this study, the identities of the participants were not identifiable in the raw data obtained. In addition, the institutions that administered the surveys collected for this study were identified, but the raw data obtained for each institution were not identifiable.

Secondary data from the Center of Postsecondary Research and Planning's NSSE self-supported auxiliary unit at Indiana University were obtained for this study. More specifically, surveys from 2013 and 2014 were analyzed to create a sample size large enough to produce results that were statistically significant. Finally, the survey data included demographic data (gender, age, classification, etc.), from undergraduate males, as well as information related to levels of diversity experience and student engagement, which were described in detail above.

Data Analysis

The data analysis reported in the next chapter used descriptive statistics, such as means, standard deviations, skewness, and kurtosis, for the Experiences with Diverse Perspectives Topical Module and student engagement (Engagement Indicators). This information was gathered using the SPSS statistical software program.

The following inferential statistics were used for each research question:

1. What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives topical module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) at large, public predominantly White institutions?

The goal of the first research question was to understand if there were important differences among Black, Hispanic, and Caucasian males' mean scores on questions from the Experiences with Diverse Perspectives topical module on the NSSE. Eleven one-way analysis of variances (ANOVAs) were conducted for research Question One and Two.

Analysis of variance is based on the following assumptions: 1) observations are normally distributed, 2) homogeneity of variance, meaning all population variances are equal or identical, and 3) observations are independent, meaning the independent variable is administered separately to each participant. Post hoc procedures, or multiple comparison tests, exist for ANOVAs due to the assumptions that are made regarding the variance, normality, and independence of the population studied. Therefore, if a statistically significant result was obtained from the ANOVAs conducted, then the Tukey procedure, or honestly significant difference (HSD) test, was conducted to determine if any differences were present. This test not only helped to determine if any differences were present, but it also minimized the probability of false rejections for all tests.

2. What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives topical module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) holding different academic ranks (freshman, sophomore, junior, senior) at large, public predominantly White institutions?

The goal of the second research question was to understand if there was a difference among Black, Hispanic, and Caucasian males from various years in college and their mean scores on questions from the Experiences with Diverse Perspectives topical module on the NSSE. A two-way analysis of variance (ANOVA) procedure was conducted for research Question Two. From this statistical analysis, two categorical independent variables – male ethnic groups and classification in college – were compared to one quantitative dependent variable – levels of informal interactional diversity (Experiences with Diverse Perspectives topical module scores). The ANOVA procedure identified statistical differences among the three ethnic groups (Caucasian, Black, and Hispanic) and their possible influence on levels of informal interactional diversity (Experiences with Diverse Perspectives topical module scores). Additionally, it identified statistical differences among the four groups of college classification (freshman, sophomore, junior, senior) and their possible influence on levels of informal interactional diversity (Experiences with Diverse Perspectives Topical Module Scores). Again, a Tukey procedure was performed if any statistically significant results were obtained.

3. What are the relationships between the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives topical module on the NSSE, and the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment (NSSE Engagement Indicators) for different male ethnic groups (Caucasian, Black, Hispanic) who are enrolled in large, public predominantly White institutions?

The goal of the third research question was to understand if there was a correlation between the Experiences with Diverse Perspectives topical module scores of different male ethnic groups and student engagement (NSSE Engagement Indicators). A multiple regression

analysis for research Question Three was conducted. The same assumptions regarding variance, normality, and independence of observations, made in research Questions One and Two, also were made with this procedure because ANOVA was used here as a special case of regression analysis. However, this regression approach was accomplished by dummy coding. Two dummy coded vectors were created to represent group membership and make White/Caucasian males a reference category for comparing differences between Black and White students and between Hispanic and White students.

According to Johnson and Christensen (2012), multiple regression analysis is used to explain the values of a dependent variable based on the values of two or more independent, or predictor, variables. In this case, the researcher wanted to know how two predictor variables (levels of informal interactional diversity and male ethnicity) impacted the dependent variable (student engagement).

Summary

This chapter included details related to the methods used in this study. More specifically, it introduced the research design for this study, the variables investigated and the instrument used to gather data, the data collection procedures, and the data analysis. A purposeful sample of NSSE survey responses were collected, which produced raw data from large, public PWIs with enrollments of 20,000 students or more. Only those surveys from institutions that matched the criteria listed and administered the survey during 2013 and 2014 were analyzed. The data analysis reported in the next chapter used descriptive statistics, such as frequencies, means, standard deviations, skewness, and kurtosis, for the participants, Experiences with Diverse Perspectives topical module, and student engagement (NSSE Engagement Indicators). An

ANOVA and multiple regression procedure were used to answer the three research questions posed. The next chapter presents data and the findings for this study.

CHAPTER 4

Results

Research Sample

The data used for this study were provided by the Center of Postsecondary Research and Planning's National Survey of Student Engagement (NSSE) and included a national sample of Black or African American, Hispanic or Latino, and White undergraduate males who were enrolled at five large, public PWIs. These students completed the NSSE and the Experiences with Diversity topical module in 2013 and 2014. The total sample size was 3,613 students.

Descriptive Statistics

Table 1 listed below is a frequency table that illustrates some of the demographic characteristics of the participants to provide a better understanding of the sample.

TABLE 1. Descriptive Statistics of Males in the Sample (N = 3,613)

Demographic	Variable Category	N	%
Racial or Ethnic Group	Black or African American	160	4.4
	Hispanic or Latino	326	9.0
	White	3127	86.5
Age	<19	932	26.1
	20-23	1613	45.1
	24-29	595	16.6
	30-39	296	8.3
	40-55	120	3.4
	>55	19	0.5
Classification in College	Freshman/First Year	918	25.5
	Sophomore/Second Year	144	4.0
	Junior/Third Year	368	10.2
	Senior/Fourth Year	2143	59.5
Status	<12	539	15.0
	>12	3074	85.0
Major of Study	Arts & Humanities	301	8.4

	Biological Sciences, Agriculture, & Natural Resources	372	10.4
	Physical Sciences, Mathematics, & Computer Science	282	7.9
	Social Sciences	312	8.7
	Business	633	17.7
	Communications, Media, & Public Relations	104	2.9
	Education	107	3.0
	Engineering	857	23.9
	Health Professions	201	5.6
	Social Service Professions	143	4.0
	All Other	216	6.0
	Undecided or Undeclared	55	1.5
Highest Level of Education Expected to Complete	<Bachelor's degree	97	2.7
	Bachelor's degree (B.A., B.S., etc.)	1072	29.9
	Master's degree (M.A., M.S., etc.)	1494	41.7
	Doctoral/Professional degree (Ph.D., J.D., M.D., etc.)	922	25.7
International Student	Yes	70	2.0
	No	3501	98.0
First Generation Student	Yes	1232	34.3
	No	2355	65.7

Overall, the data show the majority of men in the sample were White (86.5%), 20 to 23 years old (45.1%), classified as seniors or fourth-year students (59.5%), enrolled in at least 12 credit hours (85%), and were not international students or the first in their family to attend college. The sample highlighted Engineering (23.9%) and business (17.7%) as the most frequently reported majors.

The variables measured in this study were levels of informal interactional diversity and student engagement in areas related to academic challenge, learning with peers, experiences with faculty, and campus environment. The scales in the NSSE that were used to measure these variables were the Diverse Perspectives topical module (informal interactional diversity) and the

Engagement Indicators (student engagement). Frequency scores for each question in the Diverse Perspectives Topical Module are provided in Table 2. Frequency scores for each question in the Engagement Indicator subscales are provided in Tables 3, 4, 5, and 6.

TABLE 2. Frequency Scores Diverse Perspectives Topical Module (N = 3,613)

Item Wording or Description	Variable Name	Values	Response Options	Count	%
1. During the current school year, to what extent have events or activities offered at your institution emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.)	DIV01 *(N=3547)*	1	Very little	577	16
		2	Some	1421	39.3
		3	Quite a bit	1075	29.8
		4	Very much	474	13.1
2. During the current school year, about how often have you attended events or activities that encouraged you to examine your understanding of the following?					
a. Economic or social inequality	DIV02a *(N=3563)*	1	Never	2035	56.3
		2	Sometimes	1026	28.4
		3	Often	358	9.9
		4	Very Often	144	4.0
b. Issues of race, ethnicity, or nationality	DIV02b *(N=3559)*	1	Never	2121	58.7
		2	Sometimes	967	26.8
		3	Often	329	9.1
		4	Very Often	142	3.9
c. Religious or philosophical differences	DIV02c *(N=3560)*	1	Never	2136	59.1
		2	Sometimes	934	25.9
		3	Often	343	9.5
		4	Very Often	147	4.1
d. Different political viewpoints	DIV02d *(N=3559)*	1	Never	2007	55.5
		2	Sometimes	1013	28.0
		3	Often	399	11.0
		4	Very Often	140	3.9
e. Issues of gender or sexual orientation	DIV02e *(N=3543)*	1	Never	2368	65.5
		2	Sometimes	778	21.5
		3	Often	266	7.4
		4	Very Often	131	3.6
3. During the current school year, about how often have you had discussions about the following?					
a. Economic or social inequality	DIV03a *(N=3566)*	1	Never	553	15.3
		2	Sometimes	1434	39.7
		3	Often	984	27.2
		4	Very Often	595	16.5
	DIV03b	1	Never	718	19.9

b. Issues of race, ethnicity, or nationality	*(N=3563)*	2	Sometimes	1458	40.4
		3	Often	854	23.6
		4	Very Often	533	14.8
c. Religious or philosophical differences	DIV03c *(N=3557)*	1	Never	734	20.3
		2	Sometimes	1380	38.2
		3	Often	831	23.0
		4	Very Often	612	16.9
d. Different political viewpoints	DIV03d *(N=3554)*	1	Never	600	16.6
		2	Sometimes	1344	37.2
		3	Often	957	26.5
		4	Very Often	653	18.1
e. Issues of gender or sexual orientation	DIV03e *(N=3547)*	1	Never	1036	28.7
		2	Sometimes	1405	28.9
		3	Often	652	18.0
		4	Very Often	454	12.6

Frequency scores for the Diverse Perspectives topical module in Table 2 had a few distinctions. First, institutions offered some events or activities that emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.); yet, the majority of males in this sample reported that they never attended events that encouraged understanding of economic or social inequality (56.3%), race, ethnicity, or nationality (58.7%), religious or philosophical differences (59.1%), different political viewpoints (55.5%), or issues of gender or sexual orientation (65.5%). By contrast, the males in this sample reported spending at least some time discussing all of the topics listed. Of those listed, students spent the most time on average discussing issues of race, ethnicity, or nationality (40.4%).

TABLE 3. Frequency Scores Academic Challenge Subscale (N = 3,613)

Item Wording or Description	**Variable Name**	**Values**	**Response Options**	**Count**	**%**
• During the current school year, how much has your coursework emphasized the following: • Applying facts, theories, or methods to practical problems or new situations	HO *(N=3,574)*	1	Very Little	107	3.0
		2	Some	615	17.0
		3	Quite a Bit	1561	43.2
		4	Very Much	1291	35.7

• Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HO *(N=3,571)*	1	Very Little	125	3.5
		2	Some	754	20.9
		3	Quite a Bit	1513	41.9
		4	Very Much	1179	32.6
• Evaluating a point of view, decision, or information source	HO *(N=3,572)*	1	Very Little	289	8.0
		2	Some	1086	30.1
		3	Quite a Bit	1376	38.1
		4	Very Much	821	22.7
• Forming a new idea or understanding from various pieces of information	HO *(N=3,571)*	1	Very Little	225	6.2
		2	Some	997	27.6
		3	Quite a Bit	1440	39.9
		4	Very Much	909	25.2
• During the current school year, how often have you:					
• Combined ideas from different courses when completing assignments	RL *(N=3,584)*	1	Never	111	3.1
		2	Sometimes	932	25.8
		3	Often	1529	42.3
		4	Very Often	1012	28.0
• Connected your learning to societal problems or issues	RL *(N=3,568)*	1	Never	325	9.0
		2	Sometimes	1357	37.6
		3	Often	1219	33.7
		4	Very Often	667	18.5
• Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course descriptions or assignments	RL *(N=3,572)*	1	Never	662	17.2
		2	Sometimes	1483	41.0
		3	Often	944	26.1
		4	Very Often	523	14.5
• Examined the strengths and weaknesses of your own views on a topic or issue	RL *(N=3,573)*	1	Never	189	5.2
		2	Sometimes	1168	32.3
		3	Often	1466	40.6
		4	Very Often	750	20.8
• Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	RL *(N=3,574)*	1	Never	168	4.6
		2	Sometimes	1108	30.7
		3	Often	1142	39.9
		4	Very Often	856	23.7
• Learned something that changed the way you understand an issue or concept	RL *(N=3,570)*	1	Never	109	3.0
		2	Sometimes	1144	31.7
		3	Often	1509	41.8
		4	Very Often	808	22.4
• Connected ideas from your courses to your prior experiences and knowledge	RL *(N=3,559)*	1	Never	47	1.3
		2	Sometimes	640	17.7
		3	Often	1576	43.6
		4	Very Often	1296	35.9
• During the current school year, how often have you:					
	LS	1	Never	113	3.1

• Identified key information from reading assignments	*(N=3,590)*	2	Sometimes	727	20.1
		3	Often	1460	40.4
		4	Very Often	1290	35.7
• Reviewed your notes after class	LS *(N=3,584)*	1	Never	291	8.1
		2	Sometimes	1248	34.5
		3	Often	1052	29.1
		4	Very Often	993	27.5
• Summarized what you learned in class or from the course materials	LS *(N=3,554)*	1	Never	286	7.9
		2	Sometimes	1173	32.5
		3	Often	1229	34.0
		4	Very Often	866	24.0
• During the current school year, how often have you:					
• Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QR *(N=3599)*	1	Never	291	8.1
		2	Sometimes	1017	28.1
		3	Often	1323	36.6
		4	Very Often	968	26.8
• Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QR *(N=3,594)*	1	Never	638	17.7
		2	Sometimes	1314	36.4
		3	Often	997	27.6
		4	Very Often	645	17.9
• Evaluated what others have concluded from numerical information	QR *(N=3,590)*	1	Never	512	14.2
		2	Sometimes	1328	36.8
		3	Often	1194	33.0
		4	Very Often	556	15.4

Note: HO = Higher-Order Learning; RL = Reflective & Integrative Learning; LS = Learning Strategies; QR = Quantitative Reasoning

Results in Table 3 illustrated some distinctions relevant to this study's research questions. First, students believed their coursework emphasized more lower-level learning, such as application and analyzation, than higher-order learning, such as evaluation and synthesizing new ideas. However, the students in this sample reported they often tried to examine both sides of their argument, tried to see someone else's point of view, learned new information that changed their perspective, and connected ideas from coursework to prior knowledge.

TABLE 4. Frequency Scores Learning with Peers Subscale (N = 3,613)

Item Wording or Description	Variable Name	Values	Response Options	Count	%
• During the current school year, how often have you:					
• Asked another student to help you understand course material	CL *(N=3,587)*	1	Never	419	11.6
		2	Sometimes	1548	42.8
		3	Often	1083	30.0
		4	Very Often	537	14.9
• Explained course material to one or more students	CL *(N=3,590)*	1	Never	93	2.6
		2	Sometimes	1175	32.5
		3	Often	1467	40.6
		4	Very Often	855	23.7
• Prepared for exams by discussing or working through course material with other students	CL *(N=3,584)*	1	Never	525	14.5
		2	Sometimes	1282	35.5
		3	Often	1028	28.5
		4	Very Often	749	20.7
• Worked with other students on course projects or assignments	CL *(N=3,589)*	1	Never	173	4.8
		2	Sometimes	1119	31.0
		3	Often	1286	35.6
		4	Very Often	1011	28.0
• During the current school year, how often have you had discussions with people from the following groups:					
• People from a race or ethnicity other than your own	DD *(N=3,589)*	1	Never	188	5.2
		2	Sometimes	965	26.7
		3	Often	1062	29.4
		4	Very Often	1374	38.0
• People from an economic background other than your own	DD *(N=3,589)*	1	Never	137	3.8
		2	Sometimes	819	22.7
		3	Often	1304	36.1
		4	Very Often	1329	36.8
• People with religious beliefs other than your own	DD *(N=3,583)*	1	Never	182	5.0
		2	Sometimes	921	25.5
		3	Often	1113	30.8
		4	Very Often	1367	37.8
• People with political views other than your own	DD *(N=3,575)*	1	Never	160	4.4
		2	Sometimes	793	21.9
		3	Often	1179	32.6
		4	Very Often	1443	39.9

Note: CL = Collaborative Learning; DD = Discussions with Diverse Peers

Frequency scores from Table 4 suggested the majority of students in this sample often worked with other students on projects or assignments, compared to other types of collaborative learning environments. In addition, the majority of students responded they often or very often had discussions with peers from different backgrounds (race or ethnicity, economic, religious, and political orientation).

TABLE 5. Frequency Scores Experiences with Faculty Subscale (N = 3,613)

Item Wording or Description	Variable Name	Values	Response Options	Count	%
• During the current school year, how often have you:					
• Talked about career plans with a faculty member	SF *(N=3,574)*	1	Never	791	21.9
		2	Sometimes	1614	44.7
		3	Often	735	20.3
		4	Very Often	434	12.0
• Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SF *(N=3,563)*	1	Never	1790	49.5
		2	Sometimes	1041	28.8
		3	Often	429	11.9
		4	Very Often	303	8.4
• Discussed course topics, ideas, or concepts with a faculty member outside of class	SF *(N=3,568)*	1	Never	981	27.2
		2	Sometimes	1565	43.3
		3	Often	730	20.2
		4	Very Often	292	8.1
• Discussed your academic performance with a faculty member	SF *(N=3,567)*	1	Never	1040	28.8
		2	Sometimes	1672	46.3
		3	Often	604	16.7
		4	Very Often	251	6.9
• During the current school year, to what extent have your instructors done the following:					
• Clearly explained course goals and requirements	ET *(N=3,591)*	1	Very Little	79	2.2
		2	Some	639	17.7
		3	Quite a Bit	1645	45.5
		4	Very Much	1228	34.0
• Taught course sessions in an organized way	ET *(N=3,587)*	1	Very Little	97	2.7
		2	Some	631	17.5
		3	Quite a Bit	1732	47.9
		4	Very Much	1127	31.2
• Used examples or illustrations to explain difficult points	ET *(N=3,581)*	1	Very Little	98	2.7
		2	Some	669	18.5
		3	Quite a Bit	1513	41.9

		4	Very Much	1301	36.0
• Provided feedback on a draft or work in progress	ET *(N=3,583)*	1	Very Little	486	13.5
		2	Some	1207	33.4
		3	Quite a Bit	1144	31.7
		4	Very Much	746	20.6
• Provided prompt and detailed feedback on tests or completed assignments	ET *(N=3,586)*	1	Very Little	300	8.3
		2	Some	1159	32.1
		3	Quite a Bit	1344	37.2
		4	Very Much	783	21.7

Note: SF = Student-Faculty Interaction; ET = Effective Teaching Practices

The results from Table 5 indicated students had fewer interactions with faculty overall, but the frequency of these interactions dramatically declined when working with faculty outside the classroom. For example, 49.5% of students in the sample stated they never worked with a faculty member on activities other than coursework and 43.3% stated they sometimes discussed course topics or ideas with faculty outside of class. By contrast, students revealed faculty were more effective at practices inside the classroom; although they tended to provide less feedback on drafts, completed assignments, or exams.

TABLE 6. Frequency Scores Campus Environment Subscale (N = 3,613)

Item Wording or Description	**Variable Name**	**Values**	**Response Options**	**Count**	**%**
• Indicate the quality of your interactions with the following people at your institution:					
• Students	QI *(N=3,582)*	1	Poor	41	1.1
		2		60	1.7
		3		102	2.8
		4		300	8.3
		5		765	21.2
		6		1158	32.1
		7	Excellent	1156	32.0
• Academic advisors	QI *(N=3,520)*	1	Poor	168	4.6
		2		214	5.9
		3		281	7.8
		4		491	13.6
		5		698	19.3
		6		800	22.1
		7	Excellent	868	24.0

• Faculty	QI	1	Poor	45	1.2
	(N=3,566)	2		98	2.7
		3		190	5.3
		4		482	13.3
		5		876	24.2
		6		1117	30.9
		7	Excellent	758	21.0
• Student services staff (career services, student activities, housing, etc.)	QI	1	Poor	170	4.7
	(N=2,972)	2		194	5.4
		3		269	7.4
		4		462	12.8
		5		739	20.5
		6		680	18.8
		7	Excellent	458	12.7
• Other administrative staff and offices (registrar, financial aid, etc.)	QI	1	Poor	197	5.5
	(N=3,224)	2		224	6.2
		3		296	8.2
		4		581	16.1
		5		724	20.0
		6		731	20.2
		7	Excellent	471	13.0
• How much does your institution emphasize the following:					
• Providing support to help students succeed academically	SE	1	Very Little	174	4.8
	(N=3,558)	2	Some	820	22.7
		3	Quite a Bit	1600	44.3
		4	Very Much	964	26.7
• Using learning support services (tutoring services, writing centers, etc.)	SE	1	Very Little	311	8.6
	(N=3,556)	2	Some	844	23.4
		3	Quite a Bit	1404	38.9
		4	Very Much	997	27.6
• Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SE	1	Very Little	580	16.1
	(N=3,557)	2	Some	1234	34.2
		3	Quite a Bit	1078	29.8
		4	Very Much	665	18.4
• Providing opportunities to be involved socially	SE	1	Very Little	235	6.5
	(N=3,560)	2	Some	821	22.7
		3	Quite a Bit	1459	40.4
		4	Very Much	1045	28.9
• Providing support for your overall well-being (recreation, health care, counseling, etc.)	SE	1	Very Little	275	7.6
	(N=3,551)	2	Some	887	24.6
		3	Quite a Bit	1384	38.3
		4	Very Much	1005	27.8
• Helping you manage your non-academic responsibilities (work, family, etc.)	SE	1	Very Little	1094	30.3
	(N=3,553)	2	Some	1324	36.6
		3	Quite a Bit	797	22.1

	4	Very Much	338	9.4
• Attending campus activities and events (performing arts, athletic events, etc.) SE *(N=3,540)*	1	Very Little	326	9.0
	2	Some	912	25.2
	3	Quite a Bit	1358	37.6
	4	Very Much	944	26.1
• Attending events that address important social, economic, or political issues SE *(N=3,548)*	1	Very Little	555	15.4
	2	Some	1329	36.8
	3	Quite a Bit	1149	31.8
	4	Very Much	515	14.3

Note: QI = Quality of Interactions; SE = Supportive Environment

Results in Table 6 showed clear distinctions in the range of frequency scores in the quality of interactions at the institution. For example, it appeared students in this sample had higher quality relationships or interactions with peers (other students) and faculty compared to administrators like academic advisors, student services staff, and other administrative staff on campus. In addition, students indicated their institution emphasized "quite a bit" of support in academics/learning, social opportunities, and wellness; however, they marked that the institution emphasized only "some" contact among students from different backgrounds, help in managing non-academic responsibilities, and events that addressed important social, economic, or political issues.

Cronbach's alpha was computed to measure the internal consistency of the variables and is available in Table 7 below. The resulting sample size for each subscale varied based on a listwise deletion performed by the SPSS software.

TABLE 7. Cronbach's Alpha for Each of the Subscales (N = 3,613)

Variable	**Scales**	**Cronbach's alpha**
Informal Interactional Diversity	Diverse Experiences Topical Module (N=3,432)	.91
Student Engagement	Academic Challenge (N=3,326)	.88
	Learning with Peers (N=3,494)	.80
	Experiences with Faculty (N=3,478)	.81
	Campus Environment (N=2,604)	.86

Each of the Cronbach's alpha for the subscales in Table 7 ranged between .80 and .91. According to Johnson and Christensen (2012), the size of Cronbach's alpha should generally be greater or equal to .70 for research purposes. The highest measure was informal interactional diversity (.91), which indicated this subscale had the highest quality of internal consistency or inter-relatedness. The lowest measure was student engagement learning with peers (.80), but this was still considered a reliable score. Johnson and Christensen (2012) warn that many items included in a test may create false assumptions with regard to the Cronbach's alpha measure; however, the number of items measured in each subscale ranged from 17 in the student engagement academic challenge subscale to eight in the student engagement learning with peers subscale. Therefore, these measures were still considered adequate.

Table 8 and 9 list the descriptive statistics and range of scores for the sample participants on each of the variables. This information includes the means, standard deviations, skewness, and kurtosis for informal interactional diversity (Experiences with Diverse Perspectives Topical Module) and student engagement (Engagement Indicators); the range of scores for each subscale; and the percent of males by ethnic group who scored within the noted range of scores.

TABLE 8. Descriptive Statistics of the Informal Interactional Diversity Variable (N = 3,613)

Question	*M*	*SD*	*Sk*	*Ku*	Range of Scores	% of B Males	% of H Males	% of W Males
1. *During the current school year, to what extent have events or activities offered at your institution emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.)*	2.41	.91	.160	-.777	1 2 3 4	16.7 34.6 32.1 16.7	17.5 39.7 31.6 11.3	16.1 40.4 30.1 13.4

2. *During the current school year, about how often have you attended events or activities that encouraged you to examine your understanding of the following?*								
a. Economic or social inequality	1.61	.83	1.261	.835	1 2 3 4	52.6 31.4 10.3 5.8	53.7 28.0 13.0 5.3	57.7 28.8 9.7 3.8
b. Race, ethnicity, or nationality	1.58	.82	1.357	1.10	1 2 3 4	49.7 30.6 10.8 8.9	52.2 26.3 15.9 5.6	60.9 27.1 8.5 3.6
c. Religious or philosophical differences	1.58	.83	1.353	1.03	1 2 3 4	55.8 29.5 10.3 4.5	60.0 23.8 11.3 5.0	60.2 26.3 9.4 4.0
d. Different political viewpoints	1.63	.83	1.197	.611	1 2 3 4	55.4 29.3 11.5 3.8	56.2 22.7 15.8 5.3	56.5 29.0 10.7 3.8
e. Gender and sexual orientation	1.48	.80	1.656	2.03	1 2 3 4	60.9 24.4 8.3 6.4	62.4 21.9 11.3 4.4	67.6 21.8 7.1 3.5
3. *During the current school year, about how often have you had discussions about the following?*								
a. Economic or social inequality	2.45	.94	.173	-.878	1 2 3 4	12.7 41.4 26.8 19.1	17.1 34.8 29.5 18.6	15.5 40.7 27.4 16.4
b. Race, ethnicity, or nationality	2.34	.96	.292	-.853	1 2 3 4	15.3 35.0 28.7 21.0	23.0 32.6 25.8 18.6	20.1 42.1 23.5 82.6
c. Religious or philosophical differences	2.37	.99	.253	-.976	1 2 3	21.7 37.6 22.9	24.1 35.9 19.7	20.2 39.2 23.8

					4	17.8	10.6	16.9
d. Different political viewpoints	2.47	.98	.138	-.983	1	25.5	23.6	15.7
					2	34.4	33.9	38.4
					3	22.9	24.8	27.3
					4	17.2	17.7	18.5
e. Gender and sexual orientation	2.15	.98	.510	-.738	1	25.5	32.5	29.1
					2	41.4	35.9	39.9
					3	19.7	19.7	18.2
					4	13.4	11.9	12.9

Note: *M* = Means; *SD* = Standard Deviation; *Sk* = Skewness; *Ku* = Kurtosis; B = Black or African American; H = Hispanic or Latino; W = White

TABLE 9. Descriptive Statistics of the Student Engagement Variable (N = 3,613)

Theme	EI	*M*	*SD*	*Sk*	*Ku*	Range of Scores	% of B Males	% of H Males	% of W Males
Academic Challenge	HO	38.97	13.52	-.223	-.439	0-19	3.2	6.0	5.1
						20-39	35.9	32.0	26.1
						40-59	41.7	44.0	44.9
						60	19.2	18.0	11.8
	RL	35.95	12.41	.046	-.403	0-19	3.2	4.6	7.0
						20-39	43.9	47.1	52.8
						40-59	36.1	37.8	36.0
						60	10.3	10.5	4.3
	LS	37.39	14.64	-.074	-.704	0-19	1.9	7.5	6.8
						20-39	34.6	37.7	42.8
						40-59	42.3	34.0	36.5
						60	21.2	20.9	14.0
	QR	31.86	16.20	.012	-.667	0-19	16.3	17.8	15.9
						20-39	47.2	38.3	43.7
						40-59	28.3	31.3	30.2
						60	8.2	12.6	10.2
Learning with Peers	CL	33.88	14.00	.100	-.617	0-19	12.8	12.1	11.3
						20-39	47.0	49.8	49.1
						40-59	32.2	30.7	32.4
						60	8.0	7.4	7.2
	DD	40.97	15.58	-.454	-.511	0-19	5.3	8.0	5.4
						20-39	17.7	21.3	33.5
						40-59	32.9	36.3	38.4

						60	44.3	34.4	22.7
Experiences with Faculty	SF	20.57	14.80	.743	.034	0-19	41.8	43.7	48.9
						20-39	37.9	38.4	37.2
						40-59	13.1	13.8	11.4
						60	3.9	4.1	2.5
	ET	38.62	13.16	-.243	-.359	0-19	4.4	8.9	5.6
						20-39	40.6	39.9	41.4
						40-59	36.3	38.9	44.0
						60	18.2	12.3	9.0
Campus Environment	QI	41.46	11.44	-.630	.330	0-19	3.9	6.9	4.2
						20-39	36.8	27.3	33.2
						40-59	49.3	57.9	57.0
						60	10.0	7.9	5.6
	SE	33.81	13.63	-.068	-.476	0-19	10.8	14.5	14.1
						20-39	43.7	45.7	48.9
						40-59	34.1	34.8	32.8
						60	11.4	5.0	4.2

Note: HO = Higher-Order Learning; RL = Reflective & Integrative Learning; LS = Learning Strategies; QR = Quantitative Reasoning; CL = Collaborative Learning; DD = Discussions with Diverse Peers; SF = Student-Faculty Interaction; ET = Effective Teaching Practices; QI = Quality of Interactions; SE = Supportive Environment; EI = Engagement Indicator; *M* = Means; *SD* = Standard Deviation; *Sk* = Skewness; *Ku* = Kurtosis; B = Black or African American; H = Hispanic or Latino; W = White

Results of the Analysis

Research Question One. The following outlines the data analysis and results for research Question One, which asked "*What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) at large, public predominantly White institutions?*" To address this question, the means for each male ethnic group were obtained (as shown in Table 10) and 11 one-way analysis of variance (ANOVA) tests, one for each question on the module, were conducted. These test were performed to determine if there were important differences between levels of informal interactional diversity and Black, Hispanic, and Caucasian males.

Table 10. Informal Interactional Diversity for Each Male Ethnic Group (N = 3,613)

Ethnic Group	*n*	*M*	*SD*	*Sk*	*Ku*
Black or African American					
DIV01	156	2.49	.960	.037	-.932
DIV02a	156	1.69	.877	1.168	.583
DIV02b	157	1.79	.961	1.048	.074
DIV02c	156	1.63	.843	1.236	.786
DIV02d	157	1.64	.833	1.173	.595
DIV02e	156	1.60	.892	1.426	1.106
DIV03a	157	2.52	.945	.166	-.904
DIV03b	157	2.55	.990	.029	-1.036
DIV03c	157	2.37	1.015	.249	-1.020
DIV03d	157	2.32	1.038	.269	-1.078
DIV03e	157	2.21	.974	.451	-.740
Hispanic or Latino					
DIV01	320	2.37	.900	.148	-.736
DIV02a	322	1.70	.889	1.084	.218
DIV02b	320	1.75	.920	.954	-.179
DIV02c	320	1.61	.874	1.293	.697
DIV02d	322	1.70	.919	1.037	-.082
DIV02e	319	1.58	.858	1.355	.850
DIV03a	322	2.50	.984	.058	-1.009
DIV03b	322	2.40	1.037	.150	-1.134
DIV03c	320	2.36	1.059	.269	-1.138
DIV03d	322	2.37	1.030	.199	-1.097
DIV03e	320	2.11	.994	.511	-.794
White					
DIV01	3071	2.41	.913	.160	-.777
DIV02a	3085	1.60	.826	1.261	.835
DIV02b	3082	1.55	.818	1.357	1.101
DIV02c	3084	1.57	.827	1.353	1.034
DIV02d	3080	1.62	.833	1.197	.611
DIV02e	3068	1.46	.789	1.656	2.028
DIV03a	3087	2.45	.944	.173	-.878
DIV03b	3084	2.32	.962	.292	-.853
DIV03c	3080	2.37	.995	.253	-.976
DIV03d	3075	2.49	.977	.138	-.983
DIV03e	3070	2.15	.983	.510	-.738

Note: *n* = sample; *M* = Mean; *SD* = Standard Deviation; *Sk* = Skewness; *Ku* = Kurtosis

In order to conduct an ANOVA test, the researcher examined the assumptions of ANOVA: normality, independence of assumptions, and homogeneity of variance. To test for normality in the population distribution, skewness and kurtosis were examined and *p* values for the Shapiro-Wilk tests for each ethnic group were obtained. Information for these tests are shown in Table 11.

Table 11. Distribution Normality for Informal Interactional Diversity (N = 3,613)

Ethnic Group	Skewness	Kurtosis	*SW*
Black or African American			
DIV01	.037	-.932	.880
DIV02a	1.168	.583	.752
DIV02b	1.048	.074	.766
DIV02c	1.236	.786	.739
DIV02d	1.173	.595	.742
DIV02e	1.426	1.106	.698
DIV03a	.166	-.904	.870
DIV03b	.029	-1.036	.874
DIV03c	.249	-1.020	.868
DIV03d	.269	-1.078	.864
DIV03e	.451	-.740	.857
Hispanic or Latino			
DIV01	.148	-.736	.878
DIV02a	1.084	.218	.752
DIV02b	.954	-.179	.764
DIV02c	1.293	.697	.705
DIV02d	1.037	-.082	.737
DIV02e	1.355	.850	.694
DIV03a	.058	-1.009	.877
DIV03b	.150	-1.134	.871
DIV03c	.269	-1.138	.856
DIV03d	.199	-1.097	.869
DIV03e	.511	-.794	.848
White			
DIV01	.160	-.777	.877
DIV02a	1.261	.835	.718
DIV02b	1.357	1.101	.694
DIV02c	1.353	1.034	.702
DIV02d	1.197	.611	.730
DIV02e	1.656	2.028	.638
DIV03a	.173	-.878	.874
DIV03b	.292	-.853	.868
DIV03c	.253	-.976	.871
DIV03d	.138	-.983	.875
DIV03e	.510	-.738	.850

Note: SW = Shapiro-Wilk

The skewness and kurtosis for each male ethnic group for the informal interactional diversity variable, which was measured using the 11 questions on Experiences with Diverse Perspectives topical module, was approximately normal. The negative kurtosis scores for all three male ethnic groups regarding questions one and three on the topical module were platykurtic, which indicated fewer extreme values than a normal distribution. Kurtosis scores that were greater than zero for all three male ethnic groups were leptokurtic, which suggested

more peaked distributions with lots of extreme values. Table 11 showed leptokurtic scores for all Black or African American and White male responses on question two of the topical module, which asked students if they attended events or activities that encouraged them to examine their understanding of specific issues. In this case, leptokurtic scores for Hispanic or Latino male responses were only associated with events or activities related to economic or social inequality, religious or philosophical differences, and gender and sexual orientation. The *p* values for the Shapiro-Wilk tests were greater than .05 for all three male ethnic groups on each question, which confirms the data were normally distributed for each of these groups.

The researcher also examined the independence assumption. According to the NSSE (2017), students who participated in the survey were asked to independently complete it based on their own experiences during the current school year.

The last assumption, the homogeneity of variance of the ANOVAs, was examined using Levene's test. The Levene's test results indicated there were five statistically significant differences in the variances of the ethnic male groups (attending events that encouraged understanding of economic or social inequality ($F(2,3560) = 3.306$, $p<.05$), attending events that encouraged understanding of issues related to race, ethnicity, or nationality ($F(2,3556) = 14.421$, $p<.05$), attending events that encouraged understanding of different political viewpoints ($F(2,3556) = 6.194$, $p<.05$), attending events that encouraged understanding of issues related to gender or sexual orientation ($F(2,3540) = 9.218$, $p<.05$), discussing issues of race, ethnicity, or nationality ($F(2,3560) = 6.973$, $p<.05$)). Although the assumption of equal variances was violated, the difference in variance was relatively small (e.g. the max standard deviation ratio .961/.818 = 1.17).

Table 12 shows the ANOVA table for informal interactional diversity and race. It outlines the source, degrees of freedom (*df*), mean squared values (*MS*), *F* values, and *p* values, for the analysis of the dependent variable. It is important to note that the sample sizes for each group were unequal. To account for this unbalanced design, the classical experimental design approach, which is a Type II analysis, was used. The analysis indicated statistical significance in that ethnic male group could be used as a predictor for informal interactional diversity as it related to attending events or activities related to economic or social inequality ($F(2,3557) = 3.189$, $p<.05$), attending events or activities related to race, ethnicity, or nationality ($F(2,3553) = 15.107$, $p<.05$), attending events or activities related to gender and sexual orientation ($F(2,537) = 5.456$, $p<.05$), discussing issues of race, ethnicity, or nationality ($F(2,3559) = 5.119$, $p<.05$), and discussing different political views ($F(2,3548) = 4.471$, $p<.05$).

TABLE 12. Informal Interactional Diversity ANOVA Tests (N = 3,613)

Source	*df*	*SS*	*MS*	*F* value	*p* value
DIV01					
Ethnicity	2	1.347	.674	.811	.444
Error	3541	2939.506	.830		
DIV02a					
Ethnicity	2	4.337	2.169	3.189	.041
Error	3557	2418.897	.680		
DIV02b					
Ethnicity	2	20.044	10.022	15.107	.000
Error	3553	2357.044	.663		
DIV02c					
Ethnicity	2	1.088	.544	.795	.452
Error	3554	2431.991	.684		
DIV02d					
Ethnicity	2	2.154	1.077	1.550	.212
Error	3553	2467.928	.695		
DIV02e					
Ethnicity	2	6.749	3.375	5.456	.004
Error	3537	2187.604	.618		
DIV03a					
Ethnicity	2	1.167	.584	.656	.519
Error	3560	3168.992	.890		
DIV03b					
Ethnicity	2	9.458	4.729	5.119	.006
Error	3557	3286.197	.924		

DIV03c Ethnicity Error	2 3551	.033 3518.643	.016 .991	.017	.984
DIV03d Ethnicity Error	2 3548	8.509 3376.233	4.255 .952	4.471	.011
DIV03e Ethnicity Error	2 3541	1.215 3420.262	.608 .966	.629	.533

Note: *SS* = Sum of Squares; *df* = degrees of freedom; *MS* = Means Squared

Five post hoc Tukey HSD tests were computed to obtain pairwise mean comparisons to identify which ethnic male groups were significant. The first post hoc comparison using the Tukey HSD test indicated the mean score for level of informal interactional diversity when considering attendance at events or activities related to economic or social inequality was not significantly different for all male ethnic groups.

The second Tukey HSD test indicated the mean score for level of informal interactional diversity when considering attendance at events or activities related to issues of race, ethnicity, or nationality for White males (M=1.55, SD=.818) was significantly different from informal interactional diversity when considering attendance at attended events or activities related to issues of race, ethnicity, or nationality for Black or African American (M=1.79, SD=.961) and Hispanic or Latino males (M=1.75, SD=.920).

The third Tukey HSD test indicated the mean score for level of informal interactional diversity when considering attendance at events or activities related to issues of gender or sexual orientation for White males (M=1.46, SD=.789) was significantly different from informal interactional diversity when considering attendance at events or activities related to issues of gender or sexual orientation for Black or African American (M=1.60, SD=.892) and Hispanic or Latino males (M=1.58, SD=.858).

The fourth Tukey HSD test indicated the mean score for level of informal interactional diversity when considering discussions on issues of race, ethnicity, or nationality for White males (M=2.45, SD=.947) was significantly different only from informal interactional diversity when considering discussions related to issues of race, ethnicity, or nationality for Black or African American males (M=2.52, SD=.945).

The fifth Tukey HSD test indicated the mean score for level of informal interactional diversity when considering discussions on different political viewpoints was not significantly different for all male ethnic groups.

Research Question Two. Question Two of the study asked "*What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) holding different academic ranks (freshman, sophomore, junior, senior) at large, public predominantly White institutions?*" To address this question, the means for each academic rank (college classification) and male ethnic group were obtained and 11 two-way analysis of variance (ANOVA) tests, one for each question on the module, were conducted. The data received consisted of three male ethnic groups (Caucasian, Black, and Hispanic) and five academic ranks (freshman/first year, sophomore/second year, junior/third year, senior/fourth year, and unclassified/other). The means for the ethnic groups were shown in Table 10. The means for academic rank are listed below in Table 13. The means for the subgroups defined by the combination of classification and ethnic male group are listed in Appendix C.

The ANOVAs were performed to understand if there was a difference among Black, Hispanic, and Caucasian males from various years in college and their mean scores on questions from the Experiences with Diverse Perspectives Topical Module on the NSSE.

Table 13. Informal Interactional Diversity for Each Academic Rank (N = 3,613)

Academic Rank	*n*	*M*	*SD*	*Sk*	*Ku*
Freshman/First Year					
DIV01	873	2.52	.889	-.016	-.735
DIV02a	873	1.62	.790	1.114	.624
DIV02b	873	1.61	.792	1.172	.691
DIV02c	873	1.61	.807	1.211	.767
DIV02d	873	1.64	.791	1.089	.513
DIV02e	873	1.54	.782	1.392	1.291
DIV03a	873	2.35	.871	.274	-.569
DIV03b	873	2.29	.874	.305	-.555
DIV03c	873	2.35	.927	.267	-.759
DIV03d	873	2.41	.922	.199	-.785
DIV03e	873	2.09	.924	.564	-.480
Sophomore/Second Year					
DIV01	130	2.46	.941	.198	-.844
DIV02a	130	1.62	.791	1.144	.624
DIV02b	130	1.58	.795	1.268	.955
DIV02c	130	1.57	.816	1.295	.812
DIV02d	130	1.60	.803	1.310	1.198
DIV02e	130	1.51	.809	1.579	1.753
DIV03a	130	2.50	1.044	.042	-1.167
DIV03b	130	2.35	1.018	.315	-.988
DIV03c	130	2.43	1.049	.166	-1.153
DIV03d	130	2.39	1.060	.228	-1.156
DIV03e	130	2.19	1.093	.441	-1.114
Junior/Third Year					
DIV01	346	2.33	.920	.250	-.743
DIV02a	346	1.61	.848	1.235	.608
DIV02b	346	1.56	.829	1.340	.846
DIV02c	346	1.57	.839	1.356	.941
DIV02d	346	1.59	.833	1.246	.619
DIV02e	346	1.46	.799	1.721	2.137
DIV03a	346	2.38	.978	.271	-.912
DIV03b	346	2.21	.998	.464	-.811
DIV03c	346	2.28	1.022	.394	-.946
DIV03d	346	2.83	.984	.234	-.948
DIV03e	346	2.06	.979	.637	-.573
Senior/Fourth Year					
DIV01	2047	2.37	.915	.221	-.750
DIV02a	2047	1.60	.830	1.329	1.018
DIV02b	2047	1.56	.824	1.460	1.397
DIV02c	2047	1.56	.824	1.427	1.250
DIV02d	2047	1.62	.845	1.230	.645
DIV02e	2047	1.45	.777	1.775	2.470
DIV03a	2047	2.51	.961	.109	-.954
DIV03b	2047	2.38	.983	.249	-.944
DIV03c	2047	2.39	1.016	.225	-1.049
DIV03d	2047	2.52	.993	.085	-1.048
DIV03e	2047	2.19	1.002	.461	-.843

Note: *n* = sample; *M* = Mean; *SD* = Standard Deviation; *Sk* = Skewness; *Ku* = Kurtosis

In order to conduct an ANOVA test, the researcher examined the assumptions of ANOVA: normality, independence of assumptions, and homogeneity of variance. To test for normality in the population distribution, skewness and kurtosis were examined and *p* values for the Shapiro-Wilk tests for each college classification group were obtained. Information for these tests are shown in Table 14.

Table 14. Distribution Normality for Informal Interactional Diversity (N = 3,613)

College Classification Group	Skewness	Kurtosis	*SW*
Freshman/First Year			
DIV01	-.016	-.735	.878
DIV02a	1.114	.624	.741
DIV02b	1.172	.691	.737
DIV02c	1.211	.767	.733
DIV02d	1.089	.513	.751
DIV02e	1.392	1.291	.699
DIV03a	.274	-.569	.868
DIV03b	.305	-.555	.867
DIV03c	.267	-.759	.872
DIV03d	.199	-.785	.875
DIV03e	.564	-.480	.848
Sophomore/Second Year			
DIV01	.198	-.844	.872
DIV02a	1.144	.624	.741
DIV02b	1.268	.955	.723
DIV02c	1.295	.812	.706
DIV02d	1.310	1.198	.725
DIV02e	1.579	1.753	.662
DIV03a	.042	-1.167	.872
DIV03b	.315	-.988	.861
DIV03c	.166	-1.153	.867
DIV03d	.228	-1.156	.862
DIV03e	.441	-1.114	.838
Junior/Third Year			
DIV01	.250	-.743	.874
DIV02a	1.235	.608	.720
DIV02b	1.340	.846	.693
DIV02c	1.356	.941	.697
DIV02d	1.246	.619	.713
DIV02e	1.721	2.137	.626
DIV03a	.271	-.912	.868
DIV03b	.464	-.811	.853
DIV03c	.394	-.946	.855
DIV03d	.234	-.948	.872
DIV03e	.637	-.573	.835
Senior/Fourth Year			
DIV01	.221	-.750	.875
DIV02a	1.329	1.018	.715
DIV02b	1.460	1.397	.690
DIV02c	1.427	1.250	.692
DIV02d	1.230	.645	.726
DIV02e	1.775	2.470	.625
DIV03a	.109	-.954	.876
DIV03b	.249	-.944	.871
DIV03c	.225	-1.049	.869
DIV03d	.085	-1.048	.875
DIV03e	.461	-.843	.853

Note: SW = Shapiro-Wilk

The skewness and kurtosis for each college classification group for the informal interactional diversity variable, which was measured using the 11 questions on Experiences with Diverse Perspectives topical module, was approximately normal. The negative kurtosis scores for each academic rank (Freshman/First Year, Sophomore/Second Year, Junior/Third Year, Senior/Fourth Year) regarding questions one and three on the topical module were platykurtic, which indicated fewer extreme values than a normal distribution. Kurtosis scores that were greater than zero for each academic rank (Freshman/First Year, Sophomore/Second Year, Junior/Third Year, Senior/Fourth Year) were leptokurtic, which suggested more peaked distributions with lots of extreme values. Leptokurtic scores were associated with question two on the topical module, which asked students if they attended events or activities that encouraged them to examine their understanding of specific issues, for each academic rank (Freshman/First Year, Sophomore/Second Year, Junior/Third Year, Senior/Fourth Year). The *p* values for the Shapiro-Wilk tests were greater than .05 for all academic ranks on each question, which confirms the data were normally distributed for each of these groups.

The researcher also examined the independence assumption. According to the NSSE (2017), students who participated in the survey were asked to independently complete it based on their own experiences during the current school year.

The last assumption that was examined was the homogeneity of variance of the ANOVAs. The last assumption, the homogeneity of variance of the ANOVAs, was examined using Levene's test. The Levene's test results indicated there were eight statistically significant differences in the variances of the ethnic male groups (attending events that encouraged understanding of issues related to race, ethnicity, or nationality ($F(3,3535) = 2.704$, $p<.05$), attending events that encouraged understanding of different political viewpoints ($F(3,3534) =$

2.034, p<.05), attending events that encouraged understanding of issues related to gender or sexual orientation (F(3,3518) = 3.409, p<.05), discussing economic or social inequality (F(3,3541) = 3.737, p<.05), discussing issues of race, ethnicity, or nationality (F(3,3538) = 4.214, p<.05), discussing religious or philosophical differences (F(3,3532) = 2.893, p<.05), discussing different political viewpoints (F(3,3529) = 3.019, p<.05), and discussing issues of gender or sexual orientation (F(3,3522) = 3.103, p<.05)). Although the assumption of equal variances was violated, the ANOVA test was still considered robust due to the large sample size.

Table 15 outlines the source, degrees of freedom (*df*), mean squared values (*MS*), *F* values, and *p* values, for the analysis of the dependent variable. It is important to note that the sample sizes for each group were unequal. To account for this unbalanced design, the classical experimental design approach, which is a Type II analysis, was used. The analysis indicated statistical significance in that academic rank could be used as a predictor for informal interactional diversity as it related to institutional events and activities that emphasized perspectives on societal differences (F(3,3523) = 5.347, p<.05), discussing issues related to economic or social inequality (F(3,3541) = 4.763, p<.05), discussing issues of race, ethnicity, or nationality (F(3,3538) = 2.886, p<.05), and discussing different political viewpoints (F(3,3529) = 3.392, p<.05).

TABLE 15. Informal Interactional Diversity ANOVA Tests (N = 3,613)

Source	*df*	*SS*	*MS*	*F* value	*p* value
DIV01					
Academic Rank	4	17.746	4.436		
Ethnicity	2	1.309	.655	5.347	.000
Academic Rank*Ethnicity	8	7.489	.936		
Error	3523	2922.798	.830		
DIV02a					
Academic Rank	4	.627	.157		
Ethnicity	2	4.178	2.089	.231	.921*
Academic Rank*Ethnicity	8	11.851	1.481		
Error	3538	2402.572	.679		
DIV02b					
Academic Rank	4	2.924	.731		
Ethnicity	2	19.979	9.990	1.105	.352
Academic Rank*Ethnicity	8	9.736	1.217		
Error	3535	2338.907	.662		
DIV02c					
Academic Rank	4	1.529	.382		
Ethnicity	2	1.051	.526	.559	.692
Academic Rank*Ethnicity	8	9.724	1.216		
Error	3535	2415.0791	.683		
DIV02d					
Academic Rank	4	.573	.143		
Ethnicity	2	2.026	1.013	.206	.935
Academic Rank*Ethnicity	8	6.692	.836		
Error	3534	2452.342	.694		
DIV02e					
Academic Rank	4	6.721	1.680		
Ethnicity	2	6.652	3.326	2.727	.028*
Academic Rank*Ethnicity	8	13.510	1.689		
Error	3518	2167.719	.616		
DIV03a					
Academic Rank	4	16.922	4.231		
Ethnicity	2	1.048	.524	4.763	.001
Academic Rank*Ethnicity	8	8.435	1.054		
Error	3541	3145.143	.888		

Source	*df*	*SS*	*MS*	*F* value	*p* value
DIV03b Academic Rank Ethnicity Academic Rank*Ethnicity Error	 4 2 8 3538	 10.642 9.141 9.001 3261.785	 2.661 4.570 1.125 .922	2.886	.021
DIV03c Academic Rank Ethnicity Academic Rank*Ethnicity Error	 4 2 8 3532	 .3.972 .047 9.868 3499.407	 .993 .024 1.233 .991	1.002	.405
DIV03d Academic Rank Ethnicity Academic Rank*Ethnicity Error	 4 2 8 3529	 12.895 8.478 4.214 3353.569	 3.224 4.239 .527 .950	3.392	.009
DIV03e Academic Rank Ethnicity Academic Rank*Ethnicity Error	 4 2 8 3522	 7.836 1.140 8.374 3397.886	 1.959 .570 1.047 .965	2.031	.087

Note: *SS* = Sum of Squares; *df* = degrees of freedom; *MS* = Means Squared
*indicates interaction effect present

Four post hoc Tukey HSD tests were computed to obtain pairwise mean comparisons to identify which academic ranks were significant. The first post hoc comparison using the Tukey HSD test indicated the mean score for level of informal interactional diversity when considering institutional events and activities that emphasized perspectives on societal differences for freshman/first year (M=2.52, SD=.889) was significantly different than level of informal interactional diversity when considering institutional events and activities that emphasized perspectives on societal differences for junior/third year (M=2.33, SD=.920) and senior/fourth year (M=2.37, SD=.915).

The second Tukey HSD test indicated the mean score for level of informal interactional diversity when considering discussions on issues related to economic or social inequality for freshman/first year (M=2.35, SD=.871) was significantly different than level of informal

interactional diversity when considering discussions on issues related to economic or social inequality for senior/fourth year (M=2.51, SD=.961).

The third Tukey HSD test indicated the mean score for level of informal interactional diversity when considering discussions on issues of race, ethnicity, or nationality for junior/third year (M=2.21, SD=.998) was significantly different than level of informal interactional diversity when considering discussions on issues of race, ethnicity, or nationality for senior/fourth year (M=2.38, SD=.983).

The fourth Tukey HSD test indicated the mean score for level of informal interactional diversity when considering discussions of different political views for freshman/first year (M=2.41, SD=.922) was significantly different than level of informal interactional diversity when considering discussions of different political views for senior/fourth year (M=2.52, SD=.993).

Additionally, there were two statistically significant interactions between the effect of ethnic male groups and academic rank. The first was an interaction between the effect of ethnic male groups and academic rank on informal interactional diversity as it related to attending events or activities related to economic or social inequality ($F(3,3538) = 2.181$, $p=.026$). Simple main effects analysis showed that the means for the four academic ranks were significantly different for Black or African American males ($F(3,155)=2.971$, $p<.05$). A post hoc analysis using Tukey's HSD procedure further revealed that for Black or African American males the mean of the freshman/first year group was significantly higher than the mean for the sophomore/second year group, the junior/third year group, and the senior fourth year group. No significant differences were found when the sophomore/second year and junior/third year groups were compared. Also, no significant differences were found when the sophomore/second year

and senior/fourth year groups were compared. Finally, no significant differences were found when the junior/third year and senior/fourth year groups were compared.

The second was an interaction between the effect of ethnic male groups and academic rank on informal interactional diversity as it related to attending events or activities related to gender and sexual orientation ($F(3,3518) = 2.741$, $p=.005$). Simple main effects analysis indicated the means for the four academic ranks were significantly different for Black or African American males ($F(3,155)=2.943$, $p<.05$) and White males ($F(3,3034)=2.695$, $p<.05$). A post hoc analysis using Tukey's HSD procedure further revealed that for Black or African American males the means of all academic rank groups were significant when compared to each other. Additional post hoc analysis for White males also indicated the means of all academic rank groups were significant when compared to each other.

Research Question Three. For research Question Three, the researcher asked, "*What are the relationships between the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, and the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment (NSSE Engagement Indicators) for different male ethnic groups (Caucasian, Black, Hispanic) who are enrolled in large, public predominantly White institutions?*" Ten multiple regression tests were conducted to predict student engagement (higher-order learning, reflective and integrative learning, learning strategies, quantitative reasoning, collaborative learning, discussions with diverse others, student-faculty interaction, effective teaching practices, quality of interactions, and supportive environment) from informal interactional diversity and male ethnic group. This regression approach was accomplished by dummy coding. Two dummy coded vectors were created to represent group membership and

make the White male ethnic group a reference category for comparing differences between Black and White students and between Hispanic and White students. To control for the Type I error rate, the alpha level was set at .005 (.05 alpha level/10 dependent variables = 0.005).

Overall, each of the multiple regression analyses that were conducted was statistically significant. Table 16 outlines the *F* value, *p* value, R^2, and adjusted R^2, *t* values, parameter estimate and standardized estimate for each analysis for each dependent variable.

TABLE 16. Multiple Regression Analyses for Dependent Variables (N = 3,613)

Theme	Variable	*t* value	Parameter Estimate	Standardized Estimate	*p* value
Academic Challenge	Higher Order Learning *F(13,3338) = 35.613, p<.005, R^2=.122, Adj. R^2=.118*				
	Constant	0.211	23.431		.000
	Hispanic or Latino	2.750	2.108	.045	.006
	Black or African American	1.221	1.307	.020	.222
	DIV01	10.183	2.741	.186	.000
	DIV02a	.310	.155	.009	.756
	DIV02b	.270	.149	.009	.787
	DIV02c	.018	.008	.001	.986
	DIV02d	2.075	1.008	.062	.038
	DIV02e	-1.089	-.531	-.031	.276
	DIV03a	1.820	.768	.054	.069
	DIV03b	2.841	1.235	.088	.005
	DIV03c	-.488	-.188	-.014	.626
	DIV03d	2.742	1.040	.076	.006
	DIV03e	.524	.192	.014	.600
	Reflective and Integrative Learning *F(13,3392) = 106.948, p<.005, R^2=.291, Adj. R^2=.288*				
	Constant	22.848	14.494		.000
	Hispanic or Latino	4.403	2.766	.064	.000
	Black or African American	2.320	2.044	.034	.020
	DIV01	8.450	1.860	.138	.000
	DIV02a	1.036	.422	.028	.300
	DIV02b	.280	.126	.008	.780
	DIV02c	-.081	-.031	-.002	.936
	DIV02d	2.813	1.109	.075	.005
	DIV02e	-.727	-.288	-.018	.467
	DIV03a	7.668	2.637	.202	.000
	DIV03b	3.068	1.089	.085	.002
	DIV03c	.765	.240	.019	.445
	DIV03d	3.658	1.135	.090	.000
	DIV03e	.3.204	.958	.076	.001

Theme	Variable	*t* value	Parameter Estimate	Standardized Estimate	*p* value
Academic Challenge	Learning Strategies *F(13,3360) = 26.542, p<.005,* *R^2=.093, Adj. R^2=.090*				
	Constant	26.761	22.801		.000
	Hispanic or Latino	2.825	2.389	.047	.005
	Black or African American	3.106	3.652	.052	.002
	DIV01	9.046	2.680	.167	.000
	DIV02a	.862	.473	.027	.389
	DIV02b	.408	.247	.014	.683
	DIV02c	-.154	-.079	-.004	.877
	DIV02d	2.113	1.124	.064	.035
	DIV02e	-.939	-.503	-.027	.348
	DIV03a	1.806	.838	.054	.071
	DIV03b	1.147	.547	.036	.251
	DIV03c	-.265	-.112	-.008	.791
	DIV03d	1.607	.674	.045	.108
	DIV03e	1.077	.432	.029	.282
	Quantitative Reasoning *F(13,3338) = 23.056, p<.005,* *R^2=.081, Adj. R^2=.078*				
	Constant	18.448	17.445		.000
	Hispanic or Latino	.533	.499	.009	.594
	Black or African American	-1.675	-2.183	-.028	.094
	DIV01	6.544	2.150	.121	.000
	DIV02a	2.744	1.670	.085	.006
	DIV02b	.318	.213	.011	.750
	DIV02c	-.603	-.343	-.017	.546
	DIV02d	2.105	1.244	.064	.035
	DIV02e	-.735	-.435	-.021	.462
	DIV03a	2.794	.1.437	.084	.005
	DIV03b	-.478	-.254	-.015	.633
	DIV03c	-1.233	-.578	-.036	.218
	DIV03d	3.547	1.645	.099	.000
	DIV03e	-.082	-.036	-.002	.935
Theme	Variable	*t* value	Parameter Estimate	Standardized Estimate	*p* value
Learning with Peers	Collaborative Learning *F(13,3354) = 9.632, p<.005,* *R^2=.036, Adj. R^2=.032*				
	Constant	31.109	26.083		.000
	Hispanic or Latino	-1.354	-1.122	-.023	.176
	Black or African American	-.518	-.610	-.009	.605
	DIV01	2.827	.823	.054	.005
	DIV02a	2.889	1.560	.092	.004
	DIV02b	-1.601	-.953	-.056	.109
	DIV02c	.627	.315	.019	.531
	DIV02d	.875	.457	.027	.381
	DIV02e	1.025	.538	.030	.305
	DIV03a	1.381	.627	.043	.167
	DIV03b	-.405	-.190	-.013	.686
	DIV03c	-1.434	-.596	-.043	.152
	DIV03d	1.984	.816	.057	.047
	DIV03e	1.434	.566	.040	.152

	Discussions with Diverse Others *F(13,3378) = 50.598, p<.005, R^2=.163, Adj. R^2=.160*				
	Constant	24.546	21.352		.000
	Hispanic or Latino	3.535	3.056	.056	.000
	Black or African American	4.859	5.821	.077	.000
	DIV01	6.302	1.900	.112	.000
	DIV02a	-.842	-.427	-.025	.400
	DIV02b	2.825	1.741	.092	.005
	DIV02c	-2.159	-1.125	-.060	.031
	DIV02d	1.026	.555	.030	.305
	DIV02e	-.325	-.177	-.009	.745
	DIV03a	.910	.432	.026	.363
	DIV03b	3.107	1.517	.094	.002
	DIV03c	3.187	1.372	.088	.001
	DIV03d	5.307	2.257	.142	.000
	DIV03e	.327	.134	.008	.744
Theme	Variable	*t* value	Parameter Estimate	Standardized Estimate	*p* value
Experiences with Faculty	Student-Faculty Interaction *F(13,3354) = 41.730, p<.005, R^2=.139, Adj. R^2=.136*				
	Constant	5.170	4.323		.000
	Hispanic or Latino	1.756	1.458	.028	.079
	Black or African American	1.526	1.784	.025	.127
	DIV01	4.805	1.395	.087	.000
	DIV02a	3.861	2.083	.116	.000
	DIV02b	1.616	.960	.053	.106
	DIV02c	1.400	.704	.039	.162
	DIV02d	2.513	1.321	.074	.012
	DIV02e	-1.139	-.596	-.032	.255
	DIV03a	2.124	.965	.062	.034
	DIV03b	-.319	-.149	-.010	.750
	DIV03c	.2.585	-1.073	-.073	.010
	DIV03d	1.801	.741	.049	.072
	DIV03e	4.866	1.918	.128	.000
	Effective Teaching Practices *F(13,3407) = 22.817, p<.005, R^2=.080, Adj. R^2=.077*				
	Constant	34.769	25.581		.000
	Hispanic or Latino	-.682	-.517	-.011	.495
	Black or African American	.948	.997	.016	.343
	DIV01	10.936	2.902	.202	.000
	DIV02a	.250	.123	.008	.803
	DIV02b	-.767	-.415	-.026	.443
	DIV02c	-.594	-.272	-.017	.552
	DIV02d	.642	.306	.019	.521
	DIV02e	.647	.309	.019	.518
	DIV03a	2.061	.856	.062	.039
	DIV03b	.366	.157	.011	.714
	DIV03c	.931	.353	.027	.352
	DIV03d	1.548	.579	.043	.122
	DIV03e	.334	.120	.009	.738

Theme	Variable	*t* value	Parameter Estimate	Standardized Estimate	*p* value
Campus Environment	Quality of Interactions *F(13,3219) = 20.219, p<.005, R^2=.075, Adj. R^2=.072*				
	Constant	45.689	31.709		.000
	Hispanic or Latino	1.041	.714	.018	.298
	Black or African American	.259	.244	.004	.795
	DIV01	12.248	2.920	.233	.000
	DIV02a	.971	.426	.031	.331
	DIV02b	-1.168	-.561	-.041	.243
	DIV02c	1.709	.703	.051	.088
	DIV02d	-.430	-.182	-.013	.667
	DIV02e	.420	.179	.012	.674
	DIV03a	.608	.227	.019	.543
	DIV03b	-.651	-.251	-.021	.515
	DIV03c	-.440	-.149	-.013	.660
	DIV03d	2.247	.754	.064	.025
	DIV03e	.418	.135	.012	.676
	Supportive Environment *F(13,3379) = 80.939, p<.005, R^2=.237, Adj. R^2=.235*				
	Constant	17.710	12.844		.000
	Hispanic or Latino	1.003	.722	.015	.316
	Black or African American	2.845	2.837	.043	.004
	DIV01	22.312	5.616	.377	.000
	DIV02a	.248	.116	.007	.804
	DIV02b	.959	.492	.030	.338
	DIV02c	.624	.271	.016	.533
	DIV02d	.670	.301	.018	.503
	DIV02e	.706	.319	.018	.480
	DIV03a	-.103	-.041	-.003	.918
	DIV03b	1.218	.494	.035	.223
	DIV03c	.517	.186	.014	.605
	DIV03d	3.046	1.080	.078	.002
	DIV03e	1.067	.364	.026	.286

Note: 0.005 alpha level (.05/10=0.005)

The obtained R^2 value for each analysis revealed the amount of the variability in the dependent variable (student engagement indicators) can be accounted for by informal interactional diversity and male ethnic group. For example, the R^2 for higher order learning was 0.122, which indicated that about 12% of the variance in higher order learning was accounted for by the set of predictors (informal interactional diversity and male ethnic group). The results showed that reflective and integrative learning accounted for the largest variance by the set of

predictors with an R^2 of .291 (29.1%, p<.005) and collaborative learning accounted for the smallest amount of variance (R^2=.036 or 3.6%, p<.005).

Each multiple regression analysis indicated that its overall *F*-test was significant. More specifically, the Hispanic or Latino male ethic group was a significant predictor for reflective or integrative learning (p<.005), learning strategies (p=.005), and discussions with diverse others (p<.005). The Black or African American male ethnic group was a significant predictor for learning strategies (p=.002), discussions with diverse others (p<.005), and supportive environment (p=.004).

Informal interactional diversity was a significant predictor for all student engagement indicators when considering institutional events and activities that emphasized perspectives on societal differences (p<.005); however, it varied on many of its other components. For higher order learning, informal interactive diversity was also a significant predictor when considering discussions on issues of race, ethnicity, or nationality (p=.005). For reflective and integrative learning, attending events or activities that encouraged understanding of different political viewpoints (p=.005), having discussions related to economic or social inequality (p<.005), having discussions on issues of race, ethnicity, or nationality (p=.002), having discussions about different political viewpoints (p<.005), and having discussions on issues of gender or sexual orientation (p=.001) were also components of informal interactional diversity that were significant predictors. For quantitative reasoning, having discussions related to economic or social inequality (p=.005) and about different political views (p<.005) were two elements of informal interactional diversity that were also significant predictors.

For collaborative learning, attending events or activities that encouraged understanding of economic or social inequality (p=.004) was another component of informal interactional

diversity that was a significant predictor. For discussions with diverse others, attending events or activities that encouraged understanding of race, ethnicity, or nationality ($p=.005$), having discussions on issues of race, ethnicity, or nationality ($p=.002$), having discussions about different religious or philosophical views ($p=.001$), and having discussions about different political viewpoints ($p<.005$) were other factors of informal interactional diversity that were significant predictors.

For student-faculty interaction, attending events or activities that encouraged understanding of economic or social inequality ($p<.005$) and having discussions on issues of gender or sexual orientation ($p<.005$) were components of informal interactional diversity that were also significant predictors. Finally, for supportive environment, having discussions about different political viewpoints ($p=.002$) was the only other component of informal interactional diversity that was a significant predictor. For learning strategies and effective teaching, informal interactional diversity was only a significant predictor when considering institutional events or activities that emphasized perspectives on societal differences.

Additionally, the regression coefficients (parameter estimates) listed in Table 16 indicated that for every increase in the amount indicated by the predictor variable (informal interactional diversity or male ethnic group), the unit increase or decrease in the dependent variable (student engagement) was predicted while holding all other variables constant. For example, for every unit increase in Black or African American male ethnic group, supportive environment as a student engagement indicator was predicted to increase by 2.837 points when holding all other variables constant. However, for every unit increase in informal interactional diversity when considering discussions related to economic or social inequality, supportive

environment as a student engagement indicator was predicted to decrease by .041 points when holding all other variables constant.

In all cases, various components of informal interactional diversity were predicted to decrease student engagement variables. The most impacted appeared to be quantitative reasoning, which was expected to decrease on five components of informal interactional diversity. These included attending events or activities that encouraged understanding of religious or philosophical differences (a .343 unit decrease in quantitative reasoning for every unit increase), attending events or activities that encouraged understanding of gender or sexual orientation (a .435 unit decrease in quantitative reasoning for every unit increase), having discussions on issues of race, ethnicity, or nationality (a .254 unit decrease in quantitative reasoning for every unit increase), having discussions about religious or philosophical differences (a .578 unit decrease in quantitative reasoning for every unit increase), and having discussions on issues of gender or sexual orientation (a .036 unit in quantitative reasoning for every unit increase). Quantitative reasoning was also one of three student engagement indicators predicted to decrease on male ethnic group (a 2.183 unit decrease for every unit increase of Black or African American males). The other two student engagement indicators were effective teaching practices (a .517 unit decrease for every unit increase of Hispanic or Latino males) and collaborative learning (a .610 unit decrease for every unit increase of Black or African American males and a 1.122 decrease for every unit increase of Hispanic or Latino males).

Finally, the obtained standardized regression coefficients, also known as beta coefficients or standardized estimates, helped to identify which of the predictors had a stronger relationship with the dependent variable. These range from -1.00 to 1.00. Results in Table 16 indicated that informal interactional diversity when considering institutional events or activities that

emphasized perspectives on societal differences had a stronger relationship than any other variable on all of the student engagement indicators except reflective and integrative learning, collaborative learning, discussions with diverse others, and student faculty interaction. On these variables, having discussions about economic or social inequality (reflective and integrative learning), attending events or activities that encouraged understanding of economic or social inequality (collaborative learning), having discussions about different political viewpoints (discussions with diverse others), and having discussions on issues of gender or sexual orientation (student faculty interaction) had the strongest relationship.

Summary of the Results

In summary, the data examined were of a sample of 3,613 Black or African American, Hispanic or Latino, and White undergraduate males. The majority of the males in the sample were White and classified as seniors, or fourth-year undergraduate students (n = 1,830).

Overall, the results suggested that levels of informal interactional diversity may be different for the White male ethnic group, when compared to Black and Hispanic, for the following components of informal interactional diversity: a) attended events or activities that encouraged understanding of race, ethnicity, or nationality, b) attended events or activities that encouraged understanding of gender or sexual orientation, and c) had discussions on issues of race, ethnicity, or nationality. In addition, levels of informal interactional diversity for freshmen/first year students appeared to be influenced when: a) institutions offered events and activities that emphasize perspectives on societal differences, b) these students had discussions on issues related to economic or social inequality, c) these students had discussions on issues of race, ethnicity, or nationality, and d) these students had discussions of different political views.

Further analysis revealed that attending events or activities related to economic or social inequality may affect the level of informal interactional diversity for freshmen/first year Black or African American males more than any other academic rank or ethnic male group. Similarly, results suggested that attending events or activities related to gender and sexual orientation may influence levels of informal interactional diversity for all undergraduate Black or African American and White males, regardless of academic rank.

Informal interactional diversity had a stronger relationship than male ethnic group for each of area of student engagement (academic challenge, learning with peers, experiences with faculty, and campus environment). More specifically, informal interactional diversity when considering institutional events or activities that emphasized perspectives on societal differences had the strongest relationship on six of the student engagement indicators (higher order learning, learning strategies, quantitative reasoning, effective teaching practices, quality of interactions, and supportive environment). Informal interactional diversity when considering discussions about economic or social inequality had the strongest relationship on reflective and integrative learning; attendance at events or activities that encouraged understanding of economic or social inequality had the strongest relationship on collaborative learning; discussions about different political viewpoints had the strongest relationship on discussions with diverse others; and discussions on issues of gender or sexual orientation had the strongest relationship on student faculty interaction.

Hispanic or Latino male ethnic group was a significant predictor for reflective or integrative learning, learning strategies, and discussions with diverse others. Approximately 47% of Hispanic or Latino males scored between 20 – 39 out of 60 points for reflective or integrative learning (M=35.95). Nearly 38% of Hispanic or Latino males scored between 20 –

39 out of 60 points for learning strategies (M=37.39). Finally, about 36% of Hispanic or Latino males scored between 40 – 59 out of 60 points for discussions with diverse others (M=40.97).

The Black or African American male ethnic group was a significant predictor for learning strategies, discussions with diverse others, and supportive environment. Approximately 42% of Black or African American males scored between 40 – 59 out of 60 points for learning strategies (M=37.39). About 44% of Black or African American males scored 60 out of 60 points for discussions with diverse others (M=40.97). Finally, nearly 44% of Black or African American males scored between 20 – 39 out of 60 points for supportive environment (M=33.81).

Various components of informal interactional diversity appeared to have minor negative influences on the student engagement indicators. The most impacted student engagement indicator was quantitative reasoning, which appeared to be negatively impacted by attending events or activities that encouraged understanding of religious or philosophical differences (parameter estimate = -.343), attending events or activities that encouraged understanding of gender or sexual orientation (parameter estimate = -.435), having discussions on issues of race, ethnicity, or nationality (parameter estimate = -.254), having discussions about religious or philosophical differences (parameter estimate = -.578), and having discussions on issues of gender or sexual orientation (parameter estimate = -.036). Quantitative reasoning also appeared to be negatively impacted by the Black or African American male ethnic group (parameter estimate = -2.183), but approximately 47% of Black or African American males scored between 20 – 39 out of 60 points on that indicator (M=31.86). Finally, reflective and integrative learning accounted for the largest variance by the set of predictors with an R^2 of .291 (29.1%, $p<.005$) and collaborative learning accounted for the smallest amount of variance ($R^2=.036$ or 3.6%, $p<.005$).

The next chapter will discuss the main points of the study, recommendations for practice in higher education, and possible implications for future research.

CHAPTER 5

Discussion and Conclusion

Discussion

The purpose of this study was to further explore informal interactional diversity in undergraduate males and its possible relationship to the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment using data provided by the National Survey of Student Engagement (NSSE). Data used for this study were provided by the Center of Postsecondary Research and Planning's NSSE and included a national sample of Black or African American, Hispanic or Latino, and White undergraduate males who were enrolled at five large, public PWIs and completed the NSSE and the Experiences with Diversity Topical Module in 2013 and 2014. As a result, information from 3,613 participants were included in the study.

Although the data were collected from a national sample over only a two-year period, the number of targeted undergraduate males who participated in the survey was large. The majority of the males in the sample were White and classified as seniors, or fourth-year undergraduate students (n = 1,830). For comparison, 214 senior/fourth-year Hispanic or Latino males and 99 senior/fourth-year Black or African American males participated in the survey data provided. Among those who participated in the surveys used for this study:

- 71.2% of the males were age 23 or younger;
- 85% were full time (at least 12 credit hours);
- 66.3% were non-transfer students.

This information suggests that the majority of the participants in the sample were traditional students with regard to age, academic course load, and first-time-in-college status.

The frequency score rating 4=*Very Much*, 3=*Quite A Bit*, 2=*Some*, or 1=*Very Little* or 4=*Very Often*, 3=*Often*, 2=*Sometimes*, or 1=*Never* for each of the questions on the NSSE Experiences with Diverse Perspectives topical module was obtained. There were a couple of distinctions in frequency scores for questions in the module. First, 69.1% of the students surveyed indicated their institution offered "some" or "quite a bit of" events or activities that emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.); yet, the majority of males in this sample reported they never attended events that encouraged understanding of: economic or social inequality (56.3%), race, ethnicity, or nationality (58.7%), religious or philosophical differences (59.1%), different political viewpoints (55.5%), or issues of gender or sexual orientation (65.5%). By contrast, the males in this sample reported spending at least some time discussing all of the topics listed. Of those listed, students spent the most time on average discussing issues of race, ethnicity, or nationality (40.4%).

Therefore, it appeared that while institutions offered events or activities that encouraged informal interactional diversity, few males engaged in those opportunities. The results suggested that instead, undergraduate males preferred to discuss these issues. Whether these discussions took place inside or outside the classroom, or with peers or faculty members, was not specified. These findings seemed to correlate with the literature on undergraduate male student involvement, which suggested that Black and Hispanic males may be more successfully engaged when participating in ethnic student organizations (Barker & Avery, 2012; Gonzalez, 2002; & Museus, 2008), and White males may be more successfully engaged when participating in classes focused on minority groups (Astin, 1993b; Smith, Senter, & Stracham, 2013).

The frequency score rating 60=*Very Much*, 40=*Quite A Bit*, 20=*Some*, or 0=*Very Little*, or 60=*Very Often*, 40=*Often*, 20=*Sometimes*, 0=*Never* for each of the questions on the NSSE

Engagement Indicator subscales was also obtained. The descriptive statistics related to the academic challenge theme revealed a distinction relevant to this study's research questions, which was students believed their coursework emphasized more lower-level learning. For example, the students highlighted more application and analyzation in their coursework than evaluation of and synthesizing new ideas, which would be associated with higher-order learning. However, the students in this sample also reported they "often" tried to examine both sides of their argument (40.6%), tried to see someone else's point of view (39.9%), learned new information that changed their perspective (41.8%), and connected ideas from coursework to prior knowledge (43.6%).

Frequency scores from the learning with peers theme suggested the majority of students in this sample often worked with other students on projects or assignments, compared to other types of collaborative learning environments. In addition, the majority of students responded they often or very often had discussions with peers from different backgrounds (race or ethnicity, economic, religious, and political orientation). This may also support findings from Research Question Three, which showed that both the Hispanic or Latino and Black or African American male ethnic groups were significant predictors of the discussions with diverse others student engagement indicator.

Results from the experiences with faculty theme indicated students had fewer interactions with faculty overall, but the frequency of these interactions dramatically declined when working with faculty outside the classroom. For example, 49.5% of students in the sample stated they never worked with a faculty member on activities other than coursework and 43.3% stated they sometimes discussed course topics or ideas with faculty outside of class. By contrast, students revealed faculty were more effective at practices inside the classroom; although they tended to

provide less feedback on drafts, completed assignments, or exams. This suggested that males were either less likely to meet with faculty members outside of class, or that faculty members at these large, public PWIs provided fewer opportunities to interact with students outside of the classroom.

Finally, results from the campus environment theme showed clear distinctions in the range of frequency scores for the quality of interactions at the institution. For example, it appeared students in this sample had higher quality relationships or interactions with peers (other students) and faculty compared to administrators like academic advisors, student services staff, and other administrative staff on campus. In addition, students indicated their institution emphasized "quite a bit" of support in academics/learning, social opportunities, and wellness; however, they marked that the institution emphasized only "some" contact among students from different backgrounds, help in managing non-academic responsibilities, and events that addressed important social, economic, or political issues. This would appear to support literature that suggested the extent to which a campus environment gives priority to issues of diversity and promotes, or suppresses, a sense of belonging helps define the concept of campus climate (Astin, 1993b; Hurtado et al., 1998; Solórzano, et al., 2000; Victorino, et al., 2013).

Three research questions were investigated in this study. The findings and implications of those findings are presented below.

Research Question One. *What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) at large, public predominantly White institutions?* The goal of this research question was to understand if there were important differences among Black, Hispanic, and Caucasian males' levels of informal

interactional diversity, based on their mean scores on questions from the Experiences with Diverse Perspectives topical module on the NSSE. The findings from 11 one-way analysis of variance (ANOVA) tests, one for each question on the module, suggested that levels of informal interactional diversity for White males when compared to Black and Hispanic males were significantly different. More specifically, levels of informal interactional diversity for White males were higher than Black and Hispanic males when considering: a) attending events or activities that encouraged understanding of race, ethnicity, or nationality, b) attending events or activities that encouraged understanding on issues of gender or sexual orientation, and c) having discussions on issues of race, ethnicity, or nationality. This seemed to support literature that suggests White males' participation in classes focused on minority groups or multicultural awareness workshops may influence racial attitudes and learning (Astin, 1993b; Smith, et al., 2013).

Research Question Two. *What are the mean differences in the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, for different male ethnic groups (Caucasian, Black, Hispanic) holding different academic ranks (freshman, sophomore, junior, senior) at large, public predominantly White institutions?* The goal of this research question was to understand if there was a difference among Black, Hispanic, and Caucasian males from various years in college and their levels of informal interactional diversity, based on their mean scores on questions from the Experiences with Diverse Perspectives topical module on the NSSE. The findings from 11 two-way ANOVA tests, one for each question on the module, suggested three things:

- Levels of informal interactional diversity for freshmen/first year students were higher compared to other academic ranks when: a) institutions offer events and activities that

emphasize perspectives on societal differences, b) having discussions on issues related to economic or social inequality, c) having discussions on issues of race, ethnicity, or nationality, and d) having discussions of different political views.

Many large, public universities may be more likely to offer a variety of on-campus events and activities that target freshmen/first year students as a way of helping them learn more about what the campus has to offer, or as a way of helping these students find a sense of belonging to the institution. Similarly, freshmen/first year students may be more open to having discussions on diverse issues as a way of learning or finding a sense of belonging on a large, public university campus.

- Level of informal interactional diversity for freshmen/first year Black or African American males was higher than freshmen/first year Hispanic or White males when attending events or activities related to economic or social inequality.

The literature regarding Black males and student engagement seemed to support this finding. Research suggests that participation and leadership in student clubs, activities, and organizations on campus impact Black male students' ability to connect to, understand, and navigate the campus environment (Barker & Avery, 2012; Harper, 2012). According to Harper (2012), Black male student engagement also helps to, among other things, develop Black identities that foster productive activism at PWIs, overcome previously held notions of educational and socioeconomic disadvantage, and respond productively to racism. These students also have a higher percentage of first generation college student statuses and low-income family backgrounds. Therefore, attending events or activities focused on economic or social inequality may be seen as an opportunity by freshmen/first year Black males to learn about or get involved in a cause about which they are passionate.

- Level of informal interactional diversity for all undergraduate Black or African American and White males, regardless of academic rank, was higher than Hispanic males when attending events or activities related to gender and sexual orientation.

There was not much in the literature to support or contradict this finding, other than some research that suggested taking courses and attending events focused on minority groups appeared to influence racial attitudes and learning for White males (Astin, 1993b; Smith, et al., 2013). Therefore, activities like workshops focused on understanding sexual orientation or participation in multicultural affairs offices may be areas where White males in this study were involved. However, another factor that may have impacted this finding was the growing movement in 2013 and 2014 to foster awareness and understanding of gender and sexual orientation. In addition, several high profile U.S. Supreme Court cases surrounding gay rights took place during these academic years, which may have contributed to participation in events or activities related to issues of gender and sexual orientation.

Research Question Three. *What are the relationships between the levels of informal interactional diversity, as measured by the Experiences with Diverse Perspectives Topical Module on the NSSE, and the multi-dimensional nature of student engagement related to academic challenge, learning with peers, experiences with faculty, and campus environment (NSSE Engagement Indicators) for different male ethnic groups (Caucasian, Black, Hispanic) who are enrolled in large, public predominantly White institutions?* The goal of the this research question was to understand if there was a correlation between the Experiences with Diverse Perspectives topical module scores of different male ethnic groups and student engagement (NSSE Engagement Indicators). Findings from 10 multiple regression tests conducted using a Type I error rate of .005 (.05 alpha level/10 dependent variables = 0.005) showed that reflective

and integrative learning (R^2 = .291) and supportive environment (R^2 = .237) accounted for the largest variance by the set of predictors. This means that informal interactional diversity and male ethnic group may have a greater relationship to reflective and integrative learning and supportive environment than the other eight dependent variables.

Ratings for each of the engagement indicators were 60=*Very Much*, 40=*Quite A Bit*, 20=*Some*, or 0=*Very Little*, or 60=*Very Often*, 40=*Often*, 20=*Sometimes*, 0=*Never*. The following are ratings of how most males scored themselves on each of the dependent variables:

- Higher Order Learning: (*M*=38.97)

  In thinking about their total college experience to the point of completing the survey, 41.7% of Black or African American males, 44% of Hispanic or Latino males, and 44.9% of White males believed they encountered "quite a bit" of higher order learning in their coursework.

- Reflective or Integrative Learning (*M*=35.95)

  In thinking about their total college experience to the point of completing the survey, 43.9% of Black or African American males, 47.1% of Hispanic or Latino males, and 52.8% of White males believed they "sometimes" encountered reflective or integrative learning in their coursework.

- Learning Strategies (*M*=37.39)

  In thinking about their total college experience to the point of completing the survey, 42.2% of Black or African American males believed they "often" utilized academic learning strategies in their coursework, while 37.7% of Hispanic or Latino males and 42.8% of White males believed they only "sometimes" used them.

- Quantitative Reasoning (*M*=31.86)

In thinking about their total college experience to the point of completing the survey, 47.2% of Black or African American males, 38.3% of Hispanic or Latino males, and 43.7% of White males believed they "sometimes" encountered quantitative reasoning in their coursework.

- Collaborative Learning (*M*=33.88)

In thinking about their total college experience to the point of completing the survey, 47% of Black or African American males, 49.8% of Hispanic or Latino males, and 49.1% of White males believed they "sometimes" encountered collaborative learning at their institution.

- Discussions with Diverse Others (*M*=40.97)

In thinking about their total college experience to the point of completing the survey, 44.3% of Black or African American males believed they "often" encountered discussions with diverse others at their institution, while 36.3% of Hispanic or Latino males, and 38.4% of White males believed they "sometimes" did.

- Student Faculty Interaction (*M*=20.57)

In thinking about their total college experience to the point of completing the survey, 43.9% of Black or African American males, 43.7% of Hispanic or Latino males, and 48.9% of White males believed they "never" discussed issues or worked with faculty at their institution.

- Effective Teaching Practices (*M*=38.62)

In thinking about their total college experience to the point of completing the survey, 40.6% of Black or African American males, 39.9% of Hispanic or Latino males, and 41.4% of

White males believed they "sometimes" encountered effective teaching practices at their institution.

- Quality Interactions (*M*=41.46)

In thinking about their total college experience to the point of completing the survey, 49.3% of Black or African American males, 57.9% of Hispanic or Latino males, and 57% of White males believed they "often" encountered quality interactions with peers, faculty, staff and administrators at their institution.

- Supportive Environment (*M*=33.81)

In thinking about their total college experience to the point of completing the survey, 43.7% of Black or African American males, 45.7% of Hispanic or Latino males, and 48.9% of White males believed they "sometimes" encountered a supportive environment at their institution.

Overall, informal interactional diversity appeared to have more influence than male ethnic group for all the dependent variables. More specifically, informal interactional diversity when considering institutional events or activities that emphasized perspectives on societal differences had a stronger relationship than any other variable on all of the student engagement indicators except reflective and integrative learning, collaborative learning, discussions with diverse others, and student faculty interaction. On these variables, having discussions about economic or social inequality (reflective and integrative learning), attending events or activities that encouraged understanding of economic or social inequality (collaborative learning), having discussions about different political viewpoints (discussions with diverse others), and having discussions on issues of gender or sexual orientation (student faculty interaction) had a stronger relationship.

In addition, both Hispanic or Latino males and Black or African American males were significant predictors for the learning strategies (p=.005) and discussions with diverse others (p<.005) engagement indicators. Hispanic males were also significant predictors for the reflective or integrative learning (p<.005) engagement indicator, while Black males were significant predictors for the supportive environment (p=.004) engagement indicator. This finding seemed to support the literature that social and academic integration are critical factors during a Hispanic student's first year in college (Torres, 2003; Zarate, Sáenz, & Oseguera, 2011); although, 66% of Hispanic males who took the NSSE in 2013 and 2014 were senior/fourth year students. In addition, this finding seemed to support literature that supportive campus environment may be a more important measure of student satisfaction for Black students (Spaid, 2013; Taylor, 2004).

Informal interactional diversity was a significant predictor for all student engagement indicators when considering institutional events and activities that emphasized perspectives on societal differences (p<.005); however, it varied on many of its other components. For higher order learning, informal interactive diversity was also a significant predictor when considering discussions on issues of race, ethnicity, or nationality (p=.005). For reflective and integrative learning, attending events or activities that encouraged understanding of different political viewpoints (p=.005), having discussions related to economic or social inequality (p<.005), having discussions on issues of race, ethnicity, or nationality (p=.002), having discussions about different political viewpoints (p<.005), and having discussions on issues of gender or sexual orientation (p=.001) were also components of informal interactional diversity that were significant predictors. For quantitative reasoning, having discussions related to economic or

social inequality (p=.005) and about different political views (p<.005) were two elements of informal interactional diversity that were also significant predictors.

In each of these cases having discussions on issues was more commonly a significant predictor of engagement indicators compared to attending events or activities. This finding may be because students are more engaged on an individual level when involved in discussions. Additionally, these EIs were related to academic challenge, which would suggest the classroom environment was a place where discussions related to diversity issues were more likely to take place. Outside the classroom, research suggests that Black and Hispanic males in particular benefit from mentorship and relatively small peer groups (Astin, 1993b; Avery & Barker, 2012; Strayhorn, 2008; Hylton, 2013; Kuh et al., 2007; Tinto, 1975). These are environments in which, presumably, in-depth discussions about diverse issues can take place, whereas events and activities, particularly at PWIs, may be less likely to promote in-depth discussion.

For collaborative learning, attending events or activities that encouraged understanding of economic or social inequality (p=.004) was another component of informal interactional diversity that was a significant predictor. For discussions with diverse others, attending events or activities that encouraged understanding of race, ethnicity, or nationality (p=.005), having discussions on issues of race, ethnicity, or nationality (p=.002), having discussions about different religious or philosophical views (p=.001), and having discussions about different political viewpoints (p<.005) were other factors of informal interactional diversity that were significant predictors. These EIs were grouped together under the learning with peers theme and were related to explaining concepts to other students, working on group projects, working with other students through course material or to prepare for exams, and learning from those with backgrounds different than yours. Therefore, the findings may be related to gains in empathy.

For example, attending events that encourage understanding of economic or social inequality could help a student increase his ability to understand others. As a result, he may be better able to explain concepts to others or work together on group projects.

For student-faculty interaction, attending events or activities that encouraged understanding of economic or social inequality ($p<.005$) and having discussions on issues of gender or sexual orientation ($p<.005$) were components of informal interactional diversity that were also significant predictors. Findings related to student-faculty interaction could be explained by opportunities to engage with faculty outside the classroom at events related to economic or social inequality, as well as discussions related to issues of gender or sexual orientation inside the classroom. Much of the literature about the success of undergraduate males, specifically Black and Hispanic males, supports the idea of student-faculty interaction inside and outside the classroom (Astin, 1993b; Kuh et al., 2007; Whitt et al., 2001).

Finally, for supportive environment, having discussions about different political viewpoints ($p=.002$) was the only other component of informal interactional diversity that was a significant predictor. This may be related to the political nature of college campus environments and the diverse political viewpoints that exist on them. Even such phrases as the "free market of ideas" or "free exchange of ideas," which are often used to describe institutions of higher education, imply that politics are an inherent part of the undergraduate experience.

In all cases, various components of informal interactional diversity were predicted to decrease student engagement variables. The most impacted appeared to be quantitative reasoning, which was expected to decrease on five components of informal interactional diversity. However, more interesting was that quantitative reasoning was also one of three student engagement indicators predicted to decrease on male ethnic group (a 2.183 unit decrease

for every unit increase of Black or African American males). The other two student engagement indicators were effective teaching practices (a .517 unit decrease for every unit increase of Hispanic or Latino males) and collaborative learning (a .610 unit decrease for every unit increase of Black or African American males and a 1.122 decrease for every unit increase of Hispanic or Latino males). The decrease in quantitative reasoning for Black or African American males was an interesting finding because 52.2% (*n*=83) of Black or African American males who participated in the survey indicated they were enrolled in programs, such as Biological Sciences, Physical Sciences, Mathematics, Computer Sciences, Business, and Engineering, that directly incorporated quantitative reasoning skills.

Meanwhile, the decrease in effective teaching practices for Hispanic or Latino males seemed to support literature related to Hispanic men and their success in higher education. Pedagogical approaches that encouraged strong relationship building with faculty and staff increased Latino students' sense of belonging and feelings connected to mattering (Dayton, et al., 2004). For example, Hispanic students who attended two community colleges in Maryland reported that being able to email professors for follow up questions after class, having faculty videotape classes, and staff who encouraged them to use tutoring center resources contributed to the fact that they were still enrolled (Holland, 2011). This study also found that two primary barriers to Hispanic students in earning their degrees were finances and work schedules. Therefore, supportive faculty who led students to appropriate resources, such as financial aid, and accommodated student work schedules seemed to help these students succeed in their educational goals. However, these faculty teaching practices may be less common at large, public universities.

Finally, the decrease in collaborative learning for both Black or African American and Hispanic or Latino males may be an indication of certain factors, such as campus climate, academic support/climate, and tendencies of Hispanic males, which may be more prevalent at the PWIs in this study. Related to campus climate, Solózano et al. (2000), in which African American students perceived micro-aggressions in the classroom, such as negative faculty and peer expectations of academic performance and study group formation, as contributing to a more negative campus racial climate. In addition, Fordham and Ogbu (1986) found that various behaviors, such as speaking standard English, spending time in the library studying, working hard to get good grades in school, and getting good grades in school, were identified as "acting white" (p. 186) and were deemed unacceptable by a large number of African American students. Finally, Davis (2011) found that African American students in higher education encountered stereotypes related to athletic ability, expectations of dress, and classroom performance that affected their ability to trust others and participate in class discussions. These micro-aggressions and stereotype threats may make Black or African American males less likely to participate in collaborative learning activities with peers.

In addition, Cole (2010) found that African American students' GPA was most affected by interactions with peers and faculty members; however, course-related faculty contact was negatively correlated to African American students' GPA, and all minority students' academic performance was negatively affected by advice and criticism from faculty, mainly regarding the adequacy or quality of academic work. This may indicate a distrust in faculty evaluation that may extend to a lack of participation in assignments, such as group work and group presentations.

Finally, Holland (2011) found that two primary barriers to Hispanic students in earning their degrees were finances and work schedules. Similarly, Zarate et al. (2011) found that sufficient financial aid was also a significant factor that could help to ease Hispanic males' stress related to financing college and familial obligations to send money home. These stresses related to finances for Hispanic students could indicate a need to work more often, which would impact their ability to participate in collaborative learning practices.

Recommendations for Practice

Seifert et al. (2014) suggested diversity experiences and meaningful discussions with diverse peers have a significant general effect on cognitive skills and orientations toward inquiry and continued learning. Similarly, Pascarella (2006) suggested interactions that introduce students to diversity challenge cognitive assumptions and may have important developmental impacts during college. In addition, Kuh (2008) suggested high-impact practices, such as study abroad, might be life-changing for all undergraduate students. As a result, concepts related to globalization, global competitiveness, adaptability, and global citizenship have been integrated into higher education curriculum, programming, and institution-wide strategic planning. The purpose of this study was to further explore how a concept related to globalization, informal interactional diversity, may impact Black, Hispanic, and Caucasian undergraduate males and the multi-dimensional nature of student engagement.

The findings from this study present a number of recommendations for student and academic affairs professionals, as well as higher education administrators, to enhance the success of Black, Hispanic, and White undergraduate males at PWIs. First, research that suggests White males' participation in classes focused on minority groups or multicultural awareness workshops may influence racial attitudes and learning was supported by findings in this study. Therefore,

continued institutional support for events, activities, and discussions related to race, ethnicity, nationality, gender, or sexual orientation is needed.

Additionally, institutions that offer events and activities that emphasize perspectives on societal differences may impact levels of informal interactional diversity for freshman/first year students more than other academic ranks. In addition, freshman/first year students are more likely to increase levels of informal interactional diversity when they are involved in discussions related to issues of economic or social inequality; race, ethnicity, or nationality; and different political viewpoints. More specifically, large, public PWIs may be more likely to increase levels of informal interactional diversity for freshmen/first year Black males by targeting them for events or activities related to economic or social inequality. Finally, levels of informal interactional diversity for all undergraduate Black or African American and White males, regardless of academic rank, may be impacted by attending events or activities related to gender or sexual orientation. Therefore, large, public PWIs may benefit from offering more events or activities related to these topics.

Furthermore, this study found that informal interactional diversity was a significant predictor for all student engagement indicators when considering institutional events and activities that emphasized perspectives on societal differences. Therefore, institutions that offer events and activities that emphasize perspectives on societal differences increase levels of student engagement at every level. If institutions want to increase specific indicators, such as higher order learning, than offering more opportunities for discussions on issues of race, ethnicity, or nationality is suggested. In each case of academic challenge, having discussions on issues was more commonly a significant predictor of engagement indicators compared to

attending events or activities. Therefore, offering more environments in which discussions about diverse issues can take place may be more beneficial for increasing student engagement.

Finally, findings for the learning with peers theme, which was related to explaining concepts to other students, working on group projects, working with other students through course material or to prepare for exams, and learning from those with different backgrounds, may be related to gains in empathy. Therefore, offering more events or activities that encouraged understanding of economic or social inequality and race, ethnicity, or nationality, as well as opportunities for discussions on issues of race, ethnicity, or nationality, about different religious or philosophical views and different political viewpoints, may help students work better with their peers.

Implications for Future Research

This study found that informal interactional diversity and male ethnic group may have a stronger relationship to reflective and integrative learning and supportive environment when compared to eight other student engagement indicators. Based on the research questions posed and the statistical tests conducted, it could not be determined what about informal interactional diversity and male ethnic group effected reflective and integrative learning and supportive environment. Therefore, further research on how these particular indicators may affect engagement for Black, Hispanic, or White undergraduate males could answer questions about their success in higher education. Additionally, investigating how specific components of informal interactional diversity may impact these indicators may affect academic challenge (reflective and integrative learning) at an institution and campus environment (supportive environment).

Moreover, quantitative reasoning, effective teaching practices, and collaborative learning were indicators predicted to decrease when considering Black and Hispanic male ethnic group. Even though the majority (52.2%) of Black males who participated in the survey indicated they were enrolled in programs that directly incorporated quantitative reasoning skills, 47.2% indicated they only "sometimes" encountered quantitative reasoning in their coursework. Meanwhile, the decrease in effective teaching practices for Hispanic males seemed to suggest that certain factors about these students may impact their instructor's ability to provide clear course goals, feedback, use illustrations to explain difficult points in the course. The literature suggests that strong relationship building with faculty and staff increased Latino students' sense of belonging and that supportive faculty who led students to appropriate resources and accommodated student work schedules seemed to help these students succeed in their educational goals (Dayton, et al., 2004; Holland, 2011). However, these faculty teaching practices may be less common at large, public universities. Finally, the decrease in collaborative learning for both Black or African American and Hispanic or Latino males may be an indication of certain factors, such as campus climate, academic support/climate, and tendencies of Hispanic males, which may be more prevalent at the PWIs in this study. Therefore, more research as to why decreases in these student engagement indicators occur is recommended and may add to the literature on Black and Hispanic male student success.

Also, this study investigated a sample of Black, Hispanic, and White males at five large, public universities that were classified as PWIs. Therefore, the findings are specific to a certain type of higher education institution. For example, some research suggested attending more selective, historically Black colleges and universities (HBCUs), Hispanic serving institutions (HSIs), women's universities, and predominantly White institutions (PWIs) had an impact on

student success (Flowers, 2003; Kugelmass & Ready, 2010; Marie de la Rosa, 2002; Price, Spriggs, & Swinton, 2011). Future research may look at different types of institutions to see if there are differences in relationships between informal interactional diversity and undergraduate male student engagement.

Similarly, this study did not differentiate special student populations, such as veterans, Honors students, Athletes, or non-traditional students. The majority of the participants in this sample were identified as White senior/fourth year undergraduate men, who were enrolled as full-time students. Conclusions cannot be drawn regarding how possible relationships between informal interactional diversity and these special populations might differ. Therefore, future research on these special populations is encouraged.

Finally, a mixed-methods study with a qualitative portion, or a purely qualitative study, focused on male student perceptions of informal interactional diversity, student engagement, and campus climate or race relations at PWIs is recommended. While this quantitative study captured much from responses on NSSE, it was limited in its scope of understanding these students' perceptions of and insights on their lived experience. Qualitative research would add a richer, more in-depth perspective to the literature on undergraduate male student engagement and success.

Conclusion

This quantitative study examined levels of informal interactional diversity and Black, Hispanic, and White undergraduate men at large, public PWIs in the U.S., as well as the possible influence of those variables on student engagement. The theoretical framework for this study was based on Tinto's (1993) theory of social integration, Astin's (1993a) theory of student involvement, and persistence research by Pascarella and Terenzini (1991) because these models highlighted important environmental factors, such as the development of social networks, student-student interaction, the influence of peer groups, and the effects of a positive peer culture, which informed research on informal interactional diversity.

Again, informal interactional diversity is "the opportunity to interact with students from diverse backgrounds in the broad, campus environment" (para. 4), and research suggests engagement in informal interactional diversity could increase undergraduate students' self-reported gains (Hu & Kuh, 2003). However, the data were outdated and may have been collected by institutions using different sampling and administration procedures. Therefore, this study sought to enhance literature on informal interactional diversity in undergraduate males and its possible relationship to the multi-dimensional nature of student engagement using NSSE data.

Results of this study were based on responses from 3,613 Black, Hispanic, and White male participants. Of that sample 2,143 were senior/fourth year students. However, the majority of the sample was 1,830 White senior/fourth year undergraduate men. Findings suggested a significant difference in level of informal interactional diversity based on both male ethnic group (White males) and academic rank (freshmen/first year students). In two cases Black males also proved to be statistically significant to level of informal interactional diversity. Additionally, results indicated that all four student engagement themes (academic challenge, learning with

peers, experiences with faculty, and campus environment) may be both positively and negatively influenced by informal interactional diversity and male ethnic group.

Results for the academic challenge theme indicated that higher order learning appeared to be positively influenced by male ethnic group and informal interactional diversity, except in cases where informal interactional diversity involved attending events or activities related to issues of gender or sexual orientation and having discussions about religious or philosophical differences. Reflective and integrative learning appeared to be positively influenced by male ethnic group and informal interactional diversity, except in cases where informal interactional diversity involved attending events or activities related to issues of gender or sexual orientation and attending events or activities related to religious or philosophical differences. Learning strategies appeared to be only negatively influenced by informal interactional diversity when attending events or activities and discussing race, ethnicity, or nationality. Quantitative reasoning was the most impacted engagement indicator, with five components of informal interactional diversity negatively effecting it and one male ethnic group.

Results for the learning with peers theme indicated that both male ethnic groups appeared to negatively impact collaborative learning, as well as attending events and having discussions about race, ethnicity, or nationality or having discussions about religious or philosophical differences. Male ethnic group and informal interactional diversity appeared to have a positive influence on discussions with diverse others except in cases where informal interactional diversity involved attending events related to economic or social inequality, religious or philosophical differences, or gender and sexual orientation.

Results for the experiences with faculty theme indicated that both male ethnic group and informal interactional diversity appeared to positively influence student faculty interaction,

except in cases where informal interactional diversity included attending events or activities related to issues of gender or sexual orientation or having discussions on race, ethnicity, nationality, or religious or philosophical differences. Meanwhile, one male ethnic group appeared to have a negative influence on effective teaching practices and only cases on informal interactional diversity related to attending events or activities related to race, ethnicity, nationality, or religious or philosophical differences.

Results for the campus environment theme indicated that male ethnic group and informal interactional diversity appeared to have a positive influence on quality of interactions except in cases where informal interactional diversity involved attending events related to race, ethnicity, or nationality and religious or philosophical differences. In addition, informal interactional diversity when considering discussions on race, ethnicity, nationality, or religious or philosophical differences appeared to negatively influenced quality of interactions. On the other hand, male ethnic group and informal interactional diversity appeared to positively influence supportive environment, except in one case of informal interactional diversity (discussions on economic or social inequality).

The conclusion of this research study is that the findings support much of the literature related to informal interactional diversity, as well as the success of Black, Hispanic, and White males. Specific components of informal interactional diversity appeared to have stronger relationships to male ethnic groups, classification in college, and student engagement. Therefore, recommendations for practice highlighted these relationships. Finally, implications for future research included: a) investigating how specific indicators may affect engagement for these undergraduate male populations; b) examining why decreases in certain student engagement indicators occur for these undergraduate male populations; c) investigating these variables using

samples of participants at different types of institutions; and d) conducting a mixed-methods study with a qualitative portion, or a purely qualitative study, focused on male student perceptions of informal interactional diversity, student engagement, and campus climate or race relations at PWIs to gain more insight on the lived experience of Black, Hispanic, and White males.

REFERENCES

Albritton, T. J. (2012). Educating our own: The historical legacy of HBCUs and their relevance for educating a new generation of leaders. *Urban Review*. 44(3), 312 – 331.

American College Testing Program. (2006). *Reading between the lines: What the ACT reading test reveals about college readiness*. Iowa City: American College Testing Program.

Antonio, A.L. (2001). Diversity and the influence of friendship groups in college. *The Review of Higher Education*, 25(1), 63–89.

Antonio, A.L. (2004). The influence of friendship groups on intellectual self-confidence and educational aspirations in college. *The Journal of Higher Education*, 75(4), 446–471.

Ary, D., Jacobs, L., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7th ed.). New York: Holt, Rinehart and Winston.

Association of American Colleges and Universities. (2002). *Greater expectations: A new vision or learning as a nation goes to college*. Washington, DC: Association of American Colleges and Universities.

Astin, A. (1993a). What matters in college? *Liberal Education*. 79(4), 4 – 16.

Astin, A. (1993b). Diversity and multiculturalism on campus: How are students affected? *Change*, 25(2), 44 – 49.

Bailey, D. F., & Moore, J. L., III. (2004). Emotional isolation, depression, and suicide among African American men: Reasons for concern. In C. Rabin (Ed.), *Linking lives across borders: Gender-sensitive practice in international perspective* (pp. 186–207). Pacific Grove, CA: Brooks/Cole.

Barker, R. D. (2001). A comparison of the needs and experiences of first-year African American and Caucasian students at eight private Indiana colleges (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3029853).

Barker, M.J. & Avery, J.C. (2012). The impact of and institutional black male leadership initiative on engagement and persistence. *College Student Affairs Journal*, 30(2), 73 – 87.

Bernhardt, P. E. (2013). The advancement via individual determination (AVID) program: Providing cultural capital and college access to low-income students. *School Community Journal*, 23(1), 203 – 222.

Bridges, E. M. (2011). Racial identity development and psychological copping strategies of undergraduate and graduate African American males. *Journal of African American Males in Education*, 2(2), 150 – 167.

Carnegie Classification of Institutions of Higher Education. (2016). University of south Florida main campus. Retrieved March 29, 2016 from http://tinyurl.com/z6nkvbx.

Cabrera, N. L. (2011). Using a sequential exploratory mixed-method design to examine racial hyperprivilege in higher education. In K. A. Griffin & S. D. Museus (Eds.), *Using mixed-methods approaches to study intersectionality in higher education* (pp. 77–91). New directions for institutional research, no. 151. San Francisco, CA: Jossey-Bass.

Cabrera, N. (2012). Working through Whiteness White, male college students challenging racism. *Review of Higher Education*, 35(3), 375 – 401.

Cabrera, N. (2014a). "But I'm oppressed too": White male college students framing racial emotions as facts and recreating racism. *International Journal of Qualitative Studies in Education*, 27(6), 768 – 784.

Cabrera, N. (2014b). Exposing Whiteness in higher education: White male college students minimizing racism, claiming victimization, and recreating White supremacy. *Race Ethnicity and Education*, 17(1), 30 – 55.

Cabrera, A., Nora, A., Terenzini, P., Pascarella, E., & Hagedorn, L.S. (1999). Campus racial climate and the adjustment of students to college. *The Journal of Higher Education*, 70(2), 134 – 160.

Carter, D. (1999). The relationship of study habits, attitude, and motivation to academic achievement in a selected course of study at an historically Black university (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 9945902).

Cole, D. (2010). The effects of student-faculty interactions on minority students' college grades: Differences between aggregated and disaggregated data. *Journal of the Professoriate*, 3(2), 137 – 160.

College Student Experiences Questionnaire Assessment Program. (2014). *CESQ survey operation to close after spring 2014*. Retrieved March 29, 2016 from http://cseq.iub.edu/cseq_closeInfo.cfm.

Conger, D. & Long, M.C. (2010). Why are men falling behind? Gender gaps in college performance and persistence. *The Annals of the American Academy of Political and Social Science*, 627(1), 184 – 214.

Cross, W.E., Jr. & Fhagen-Smith, P. (2001). Patterns in African American identity development: A life span perspective. In C. L. Wijeyesinghe & B. W. Jackson, III (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 243 – 270). New York, NY: New York University Press.

Davis, T. L. (2010). Voices of gender role conflict: The social construction of college men's identity. In S. R. Harper & F. Harris (Eds.), *College men and masculinities: Theory research, and implications for practice* (pp.49 – 65). San Francisco, CA: Jossey-Bass.

Evans, N., Forney, D., Guido, F., Patton, L., & Renn, K. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). San Francisco, CA: Jossey-Bass.

Ferdman, B.M. & Gallegos, P.I. (2001). Racial identity development and Latinos in the United States. In C. L. Wijeyesinghe & B. W. Jackson, III (Eds.), New perspectives on racial identity development: A theoretical and practical anthology (pp. 243 – 270). New York, NY: New York University Press.

Ferguson-Russell, D. V. (2000). A review of dissonance and congruence among diverse student populations at a predominantly White institution (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 9976718).

Flowers, L. (2003). Differences in self-reported intellectual and social gains between African American and white college students at predominantly white institutions: Implications for student affairs professionals. *NASPA Journal*, 41(1), p. 68 – 82.

Fleming, J. (1984). *Blacks in college: A comparative study of students' success in Black and White institutions*. San Francisco, CA: Jossey-Bass.

Davis, R. (2011). The deconstruction of ambition: Campus climate, stereotype threat, and the motivational goals of African American students at a selective small liberal arts college (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3467349).

Dawson-Threat, J. (1997). Enhancing in-class academic experiences for African American men. *New Directions for Student Services*, 80, 31 – 41.

Dayton, B., Gonzalez-Vasquez, N., Martinez, C. R., and Plum, C. (2004). Hispanic-serving institutions through the eyes of students and administrators. In A. M. Ortiz (Ed.), *Addressing the unique needs of Latino American students*, New Directions for Student Services (Vol. 105, pp. 29 – 39). San Francisco: Jossey-Bass.

Digeorgio Luz, J.A. (2010). Points of departure: Becoming global citizens without leaving home. *Teaching in Higher Education*, 15(6), 715 – 720.

Featherston, E. & Ishibashi, J. (2004). Oreos and bananas: Conversations on Whiteness. In V. Lea & J. Helfand (Eds.), *Identifying race and transforming Whiteness in the classroom* (pp. 87 – 105). New York, NY: Peter Lang.

Guiffrida, D. A. (2006). Toward a cultural advancement of Tinto's theory. *The Review of Higher Education*, 29(4), 451 – 472.

Guiffrida, D. A. & Douthit, K. Z. (2010). The Black student experience at predominantly White colleges: Implications for school and college counselors. *Journal of Counseling & Development*, 88(3), 311 – 318.

Gurin, P. (1999). *Expert report of Patricia Gurin, in the compelling need for diversity in higher education*. Gratz et al. v. Bollinger et al., No. 97-75321 (E.D. Mich.), Grutter et al. v. Bollinger et al., No. 97-75928 (E.D. Mich.). Ann Arbor, MI: University of Michigan. Retrieved March 19, 2016, from http://www.umich.edu/~urel/admissions/legal/expert/gurintoc.html.

Harper, S. (2006b). Enhancing African American male student outcomes through leadership and active involvement. In M. Cuyjet & Associates (Ed.), *African American men in college* (pp. 68 – 94). San Francisco, CA: Jossey-Bass.

Harper, S. (2009). Nigger no more: A critical race counter narrative on Black male student achievement at predominantly White colleges and universities. *International Journal of Qualitative Studies in Education*, 22(6), 697-712.

Harper, S. R., & Kuykendall, J. A. (2012). Institutional efforts to improve Black male student achievement: A standards-based approach. *Change*, 44(2), 23-29.

Helms, J. E. (1995). An update of Helms's white and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181 – 198). Thousand Oaks, CA: Sage.

Henningsen, J. D. (2008). Assessing the fit of Tinto's longitudinal model of institutional departure at a community college (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3094802).

Holland, L. E. W. (2011). Retention and success of Hispanic students in Maryland community colleges (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3486687).

Hossler, D., Schmit, J., and Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore: Johns Hopkins University Press.

Howard, W. L. (2008). Underrepresented college students and the reduction of stereotype threat: Threat overprotection through social support, unrealistic optimism, and unintended self-handicapping of academic decision-making (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3455393).

Hu, S., & Kuh, G. D. (2003). Diversity experiences and college student learning and personal development. Journal of College Student Development, 44(3), 320–334.

Hurtado, S. (1992). The campus racial climate: Contexts of conflict. *Journal of Higher Education*, 63, 539-569.

Hurtado, S., Carter, D. F., & Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research of Higher Education*, 37(2), 135-158.

Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climate for racial/ethnic diversity: Education policy and practice. *The Review of Higher Education*, 21(3), 279 – 302.

Hser, M. P. (2005). Campus internationalization: A study of American universities' internationalization efforts. *International education*, 35(1), 35 – 48.

Hylton, L. R. (2013). The impact of student-faculty interaction on academic achievement and college satisfaction for Black males attending predominantly White institutions (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3587781).

Jackson, J. H. (2014). Preface. In Jackson, J. H. & Beaudry, A. (Eds.), *Black Lives Matter* (pp. 1 – 2). Cambridge, MA: Schott Foundation for Public Education.

Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles: Sage Publications.

Kelly, C. (2008). The applicability of the Tinto Model of Student Departure to at risk college students (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3305573).

Kugelmass, H. & Ready, D. (2011). Racial/Ethnic disparities in collegiate cognitive gains: A multilevel analysis of institutional influences on learning and its equitable distribution. *Research in Higher Education*, 52, 323 – 348.

Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the National Survey of Student Engagement. *Change,* 33(3), 10 – 17.

Kuh, G. D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: Association of American Colleges and Universities.

Kuh, G. D., Hayek, J. C., Carini, R.M., Ouimet, J. A., Gonyea, R. M., and Kennedy, J. (2001). NSSE technical and norms report. Bloomington, IN: Indiana University Center for Postsecondary Research and Planning.

Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., Hayek, J.C. (2007). Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations. *ASHE Higher Education Report*, 32(5), 1 - 178.

Kuh, G. D., & Love, P. G. (2000). A cultural perspective on student departure. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 196-212). Nashville, TN: Vanderbilt University Press.

Lundberg, C. (2010). Institutional commitment to diversity, college involvement, and faculty relationships as predictors of learning for students of color. *The Journal of the Professoriate*, 3(2), 50 – 74.

Marchese, T. & Hutchings, P. (1990). Watching assessment: Questions, stories, prospects. *Change*, 22(5), 12 – 38.

Marie de la Rosa, B. (2002). Minority student satisfaction with their college experience: An analysis of the CSEQ, 1990 – 2000 (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3077523).

McIntosh, P. (April, 1986). *White privilege and male privilege: A personal account of coming to see correspondences through work in women's studies*. Paper presented at the Virginia Women's Studies Association conference, Richmond, VA.

Miller, E. J. (2012). Understanding social integration and student involvement as factors of self-reported gains for African American undergraduate women (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3505618).

Miller, A. L., Sarraf, S. A., Dumford, A. D., & Rocconi, L. M. (2014). Construct validity of NSSE engagement indicators. Retrieved April 4, 2017 from http://nsse.indiana.edu/pdf/psychometric_portfolio/Validity_ConstructValidity_FactorAnalysis_2013.pdf.

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

National Survey of Student Engagement. (2017). Administration protocol and procedures. Retrieved April 4, 2017 from http://nsse.indiana.edu/html/administration_protocol.cfm.

National Survey of Student Engagement. (2016). Engagement insights: Survey findings on the quality of undergraduate education – annual results 2016. Bloomington, IN: Indiana University Center for Postsecondary Research.

National Survey of Student Engagement. (2014). From benchmarks to engagement indicators and high-impact practices. Retrieved April 3, 2017 from http://nsse.indiana.edu/pdf/Benchmarks%20to%20Indicators.pdf.

National Survey of Student Engagement. (2017). Reliability. Retrieved April 4, 2017 from http://nsse.indiana.edu/html/reliability.cfm.

National Survey of Student Engagement. (2017). Validity. Retrieved April 4, 2017 from http://nsse.indiana.edu/html/validity.cfm.

Nichols, A. H. (2009). Campus racism and White stereotype threat: Implications for campus racial climates and interracial interactions among students (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3374528).

Nonis, S. A. & Hudson, G. I. (2010). Performance of college students: Impact of study time and study habits, *Journal of Education for Business*, 85(4), 229 – 238.

Nora, A., & Crisp, G. (2012). *Future research on Hispanic students: What have we yet to learn and what new and diverse perspectives are needed to examine Latino success in higher education?* [White Paper]. San Antonio, TX: Hispanic Association of Colleges and Universities.

Núñez, A, & Bowers, A. (2011). Exploring what leads high school students to enroll in Hispanic-serving institutions: A multilevel analysis. *American Educational Research Journal*, 48(6), p. 1286 – 1313.

Núñez, A., Sparks, J., & Hernández, E. (2011). Latino access to community colleges and Hispanic-serving institutions: A national study. *Journal of Hispanic Higher Education*, 10(1), p. 18 – 40.

O'Meara, K. & Braskamp, L. (2005). Aligning faculty reward systems and development to promote faculty and student growth. *National Association of Student Personnel Administrators (NASPA) Journal*, 42(2), 223 – 240.

Pace, C. R. (1984). Measuring the quality of college student experiences. Los Angeles: Higher Education Research Institute.

Paone, T.R., Malott, K. M., & Dwyer, B. (2015). Privilege and power: Identifying and addressing Whiteness in the university setting" Promoting a system of success for all. In Sasso, P.A. & DeVitis, J.L. (Eds.) *Today's college student: A reader* (pp. 151 – 164). New York, NY: Peter Lang.

Park, J.J. (2009). Are we satisfied? A look at student satisfaction with diversity at traditionally White institutions. *Review of Higher Education*, 32, 291-320.

Pascarella, E.T. (2006). How college affects students: Ten directions for future research. *Journal of College Student Development*, 47(5), 508 – 520.

Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.

Patton, L. D. & Bondi, S. (2015). Nice White men or social justice allies? Using critical race theory to examine how White male faculty and adminstrators engage in ally work. *Race Ethnicity and Education*, 18(4), 488 – 514.

Pope, R., Reynolds, A., & Mueller, J. (2004). *Multicultural competences in student affairs*. San Francisco, CA: Jossey-Bass.

Price, G. N., Spriggs, W., & Swinton, O. H. (2011). The relative returns to graduating from a HBCU: Propensity score matching estimates from the national survey of Black Americans. *Review of Black Political Economy*, 38, p. 103 – 130.

Rendon, L. I., Novack, V., & Dowell, D. (2005). Testing race-neutral admissions models: Lessons learned from California State University Long Beach. *The Review of Higher Education*, 28(2), 221 – 243.

Reason, R. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*. 50(6), 659 – 682.

Sáenz, V.B. & Ponjuan, L. (2011). *Men of color: Ensuring the academic success of Latino males in higher education*. Report published by the Institute for Higher Education Policy.

Sax, L. J., & Arms, E. (2006, April). *The gender gap: Convergence or divergence over the college years?* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Sax, L. J., & Harper, C. E. (2007). Origins of the gender gap: Pre-college and college influences on differences between men and women. *Research in Higher Education*, 48(6), 669–694.

Schott Foundation for Public Education (5th ed.). (2014). Cambridge, MA: Schott Foundation for Public Education.

Seifert, T.A., Gillig, B., Hanson, J.M., Pascarella, E.T., & Blaich, C.F. (2014). The conditional nature of high impact/good practices on student learning outcomes. *The Journal of Higher Education*, 85(4), 531 – 564.

Smedley, B. D., Myers, H. F., & Harrell, S. P. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *Journal of Higher Education*, 64, 434-452.

Smith, J. M., Senter, M., & Strachan, J. C. (2013). Gender and White college students' racial attitudes. *Sociological Inquiry*, 83(4), 570 – 590.

Spaid, R. (2013). An examination of student satisfaction at a private, highly selective university (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3613885).

Spruhill,N., Hirt, J., & Mo, Y. (2014). Predicting persistence to degree of male college students. *Journal of College Student Retention*, 16(1), 25 – 48.

Steele, C. M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797 – 811.

Strayhorn, T. L. (2008). The role of supportive relationships in facilitating African American males' success in college. *National Association of Student Personnel Administrators (NASPA) Journal*, 45(1), 26 – 48.

Strayhorn, T. L. (2010a). When race and gender collide: Social and cultural capital's influence on the academic achievement of African American and Latino males. *The Review of Higher Education*, 33(3), 307 – 332.

Strayhorn, T. L. (2010b). The influence of diversity on learning outcomes among African American college students: Measuring sex difference. *Journal of Student Affairs Research and Practice*, 47(3), 343 – 366.

Sue, D. W. & Sue, D. (2003). Counseling the culturally diverse: Theory and practice (4th ed.). Hoboken, NJ: Wiley.

Sutton, E. M., & Kimbrough, W. M. (2001). Trends in Black student involvement. *NASPA Journal*, 39(1), 30-40.

Swail, W. S., with Redd, K. E., and Perna, L. W. (2003). Retaining minority students in higher education: A framework for success. ASHE-ERIC Higher Education Report No. 2. Washington, DC: School of Education and Human Development, The George Washington University.

Swail, W.S., Cabrera, A.F., Lee, C., & Williams, A. (2005). *Latino students and the educational pipeline*. Washington, DC: Educational Policy Institute.

Taylor, A. (2004). Persistence factors for African American undergraduate students at the University of Nevada, Reno and the University of Nevada, Las Vegas (Doctoral dissertation). Retrieved from ProQuest LLC. (UMI 3133885).

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition.*

Chicago: University of Chicago Press.

Toews, M. L, & Yazedjian, A. (2007). College adjustment among freshmen: Predictors for white and Hispanic males and females. *College Student Journal*, 41(1), 891-900.

Torres, V. (1999). Validation of a bicultural orientation model for Hispanic college students. *Journal of College Student Development*, 40(3), 285 – 298.

Torres, V. (2003). Influences on ethnic identity development of Latino college students in the first two years of college. *Journal of College Student Development*, 44(4), 532 - 547.

Torres, V. & Baxter Magolda, M.B. (2004). Reconstructing Latino identity: The influence of cognitive development on the ethnic identity process of Latino students. *Journal of College Student Development*, 45, 333 – 347.

Torres, V. & Hernandez, E. (2007). The influence of ethnic identity on self-authorship: A longitudinal study of Latino/a college students. *Journal of College Student Development*, 48, 558 – 573.

Torres, V. & Hernandez, E. (2009). Influence of an identified advisor/mentor on urban Latino students' college experience. *Journal of College Student Retention*, 11(1), 141 – 160.

Torres, V. & Zerquera, D. (2012). Hispanic-serving institutions: Patterns, predictions, and implications for informing policy discussions. *Journal of Hispanic Higher Education*, 11(3), 259 – 278.

Villaplando, O. (1994, November 9). *Comparing the effects of multiculturalism and diversity on minority and White students' satisfaction with college*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Tucson, AZ. Las Vegas, NV: ASHE.

Victorino, C. A., Nylund-Gibson, K., & Conley, S. (2013). Campus racial climate: A litmus test for faculty satisfaction at four-year colleges and universities. *Journal of Higher Education*, 84(6), 769 – 803.

Watson, L. W., & Kuh, G. D. (1996). The influence of dominant race environments on student involvement, perceptions, and educational gains: A look at historically black and predominantly white liberal arts institutions. Journal of College Student Development, 37(4), 415 – 424.

Wise, T. (2009). Addressing White privilege in independent schools: Frequently asked questions (and their answers). *Independent Schools*, 68(3), 114 – 120.

Whitt, E. J., Edison, M. I., Pascarella, E. T., Terenzini, P. T., & Nora, A. (2001). Influences on student's openness to diversity and challenge in the second and third years of college. *The Journal of Higher Education*, 72(2), 172 – 204.

Yosso, T., Ceja, M., & Solórzano, D. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1/2), 60 – 73.

Yosso, T. J., Smith, W. A., Ceja, M., & Solórzano, D. G. (2009). Critical race theory, racial microaggressions, and campus racial climate for Latino undergraduates. *Harvard Educational Review*, 79(4). 659 – 690.

Zarate, M.E., Sáenz, V. B., & Oseguera, L. (2011). Supporting the participation and success of Chicanos in higher education. In R. Valencia (Ed.), *Chicano school failure and success: Past, present & future* (pp. 120 – 140). New York, New York: Routledge.

APPENDIX A

This is a facsimile of the U.S. English version of the online NSSE instrument as it appears to the student.
A paper-formatted facsimile of the survey which includes item numbering is available on the
NSSE Web site: nsse.iub.edu/html/survey_instruments.cfm

0% Complete

During the current school year, about how often have you done the following?

Asked questions or contributed to course discussions in other ways

Very often | Often | Sometimes | Never

Prepared two or more drafts of a paper or assignment before turning it in

Very often | Often | Sometimes | Never

Come to class without completing readings or assignments

Very often | Often | Sometimes | Never

Attended an art exhibit, play, or other arts performance (dance, music, etc.)

Very often | Often | Sometimes | Never

Asked another student to help you understand course material

Very often | Often | Sometimes | Never

Explained course material to one or more students

Very often | Often | Sometimes | Never

Prepared for exams by discussing or working through course material with other students

Very often | Often | Sometimes | Never

Worked with other students on course projects or assignments

Very often | Often | Sometimes | Never

Given a course presentation

Very often | Often | Sometimes | Never

Screen 1 of 5

Combined ideas from different courses when completing assignments

Very often | Often | Sometimes | Never

Connected your learning to societal problems or issues

Very often | Often | Sometimes | Never

Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments

Very often | Often | Sometimes | Never

Examined the strengths and weaknesses of your own views on a topic or issue

Very often | Often | Sometimes | Never

Tried to better understand someone else's views by imagining how an issue looks from their perspective

Very often | Often | Sometimes | Never

Learned something that changed the way you understand an issue or concept

Very often | Often | Sometimes | Never

Connected ideas from your courses to your prior experiences and knowledge

Very often | Often | Sometimes | Never

Talked about career plans with a faculty member

Very often | Often | Sometimes | Never

Worked with a faculty member on activities other than coursework (committees, student groups, etc.)

Very often | Often | Sometimes | Never

Discussed course topics, ideas, or concepts with a faculty member outside of class

Very often | Often | Sometimes | Never

Discussed your academic performance with a faculty member

Very often | Often | Sometimes | Never

During the current school year, how much has your coursework emphasized the following?

Memorizing course material

Very much | Quite a bit | Some | Very little

Applying facts, theories, or methods to practical problems or new situations

Very much | Quite a bit | Some | Very little

Analyzing an idea, experience, or line of reasoning in depth by examining its parts

Very much | Quite a bit | Some | Very little

Evaluating a point of view, decision, or information source

Very much | Quite a bit | Some | Very little

Forming a new idea or understanding from various pieces of information

Very much | Quite a bit | Some | Very little

During the current school year, to what extent have your instructors done the following?

Clearly explained course goals and requirements

Very much | Quite a bit | Some | Very little

Taught course sessions in an organized way

Very much | Quite a bit | Some | Very little

Used examples or illustrations to explain difficult points

Very much | Quite a bit | Some | Very little

Provided feedback on a draft or work in progress

Very much | Quite a bit | Some | Very little

Provided prompt and detailed feedback on tests or completed assignments

Very much | Quite a bit | Some | Very little

Screen 1 of 5 (continued)

During the current school year, about how often have you done the following?

Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)

Very often | Often | Sometimes | Never

Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)

Very often | Often | Sometimes | Never

Evaluated what others have concluded from numerical information

Very often | Often | Sometimes | Never

Continue

Screen 1 of 5 (continued)

During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)

Up to 5 pages

None ○ 1-2 ○ 3-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ More than 20 papers ○

Between 6 and 10 pages

None ○ 1-2 ○ 3-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ More than 20 papers ○

11 pages or more

None ○ 1-2 ○ 3-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ More than 20 papers ○

During the current school year, about how often have you had discussions with people from the following groups?

People of a race or ethnicity other than your own

Very often ○ Often ○ Sometimes ○ Never ○

People from an economic background other than your own

Very often ○ Often ○ Sometimes ○ Never ○

People with religious beliefs other than your own

Very often ○ Often ○ Sometimes ○ Never ○

People with political views other than your own

Very often ○ Often ○ Sometimes ○ Never ○

During the current school year, about how often have you done the following?

Identified key information from reading assignments

Very often | Often | Sometimes | Never

Reviewed your notes after class

Very often | Often | Sometimes | Never

Summarized what you learned in class or from course materials

Very often | Often | Sometimes | Never

During the current school year, to what extent have your courses challenged you to do your best work?

Not at all 1 | 2 | 3 | 4 | 5 | 6 | Very much 7

Which of the following have you done or do you plan to do before you graduate?

Participate in an internship, co-op, field experience, student teaching, or clinical placement

Done or in progress | Plan to do | Do not plan to do | Have not decided

Hold a formal leadership role in a student organization or group

Done or in progress | Plan to do | Do not plan to do | Have not decided

Participate in a learning community or some other formal program where groups of students take two or more classes together

Done or in progress | Plan to do | Do not plan to do | Have not decided

Participate in a study abroad program

Done or in progress | Plan to do | Do not plan to do | Have not decided

Work with a faculty member on a research project

Done or in progress | Plan to do | Do not plan to do | Have not decided

Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

Done or in progress | Plan to do | Do not plan to do | Have not decided

About how many of your courses at this institution have included a community-based project (service-learning)?

- All
- Most
- Some
- None

Screen 2 of 5 (continued)

Indicate the quality of your interactions with the following people at your institution.

Students

Poor 1	2	3	4	5	6	Excellent 7	Not applicable
○	○	○	○	○	○	○	○

Academic advisors

Poor 1	2	3	4	5	6	Excellent 7	Not applicable
○	○	○	○	○	○	○	○

Faculty

Poor 1	2	3	4	5	6	Excellent 7	Not applicable
○	○	○	○	○	○	○	○

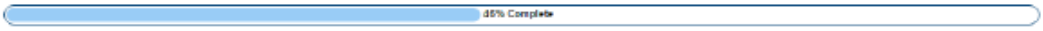
Student services staff (career services, student activities, housing, etc.)

Poor 1	2	3	4	5	6	Excellent 7	Not applicable
○	○	○	○	○	○	○	○

Other administrative staff and offices (registrar, financial aid, etc.)

Poor 1	2	3	4	5	6	Excellent 7	Not applicable
○	○	○	○	○	○	○	○

Continue



How much does your institution emphasize the following?

Spending significant amounts of time studying and on academic work

Very much | Quite a bit | Some | Very little

Providing support to help students succeed academically

Very much | Quite a bit | Some | Very little

Using learning support services (tutoring services, writing center, etc.)

Very much | Quite a bit | Some | Very little

Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)

Very much | Quite a bit | Some | Very little

Providing opportunities to be involved socially

Very much | Quite a bit | Some | Very little

Providing support for your overall well-being (recreation, health care, counseling, etc.)

Very much | Quite a bit | Some | Very little

Helping you manage your non-academic responsibilities (work, family, etc.)

Very much | Quite a bit | Some | Very little

Attending campus activities and events (performing arts, athletic events, etc.)

Very much | Quite a bit | Some | Very little

Attending events that address important social, economic, or political issues

Very much | Quite a bit | Some | Very little

Screen 3 of 5

About how many hours do you spend in a typical 7-day week doing the following?

Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Working for pay ***on campus***

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Working for pay ***off campus***

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Doing community service or volunteer work

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Providing care for dependents (children, parents, etc.)

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Commuting to campus (driving, walking, etc.)

0 ○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 21-25 ○ 26-30 ○ More than 30 ○

Of the time you spend preparing for class in a typical 7-day week, about how much is on *assigned reading*?

- ○ Very little
- ○ Some
- ○ About half
- ○ Most
- ○ Almost all

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

Writing clearly and effectively

Very much | Quite a bit | Some | Very little

Speaking clearly and effectively

Very much | Quite a bit | Some | Very little

Thinking critically and analytically

Very much | Quite a bit | Some | Very little

Analyzing numerical and statistical information

Very much | Quite a bit | Some | Very little

Acquiring job- or work-related knowledge and skills

Very much | Quite a bit | Some | Very little

Working effectively with others

Very much | Quite a bit | Some | Very little

Developing or clarifying a personal code of values and ethics

Very much | Quite a bit | Some | Very little

Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)

Very much | Quite a bit | Some | Very little

Solving complex real-world problems

Very much | Quite a bit | Some | Very little

Being an informed and active citizen

Very much | Quite a bit | Some | Very little

How would you evaluate your entire educational experience at this institution?

- Excellent
- Good
- Fair
- Poor

If you could start over again, would you go to the *same institution* you are now attending?

- Definitely yes
- Probably yes
- Probably no
- Definitely no

How many majors do you plan to complete? (Do not count minors.)

- One
- More than one

Continue

Screen 3 of 5 (continued)

70% Complete

Why do we ask about your personal background?

What is your class level?

- Freshman/first-year
- Sophomore
- Junior
- Senior
- Unclassified

Thinking about this current academic term, are you a full-time student?

- Yes
- No

How many courses are you taking for credit this current academic term?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

Of these, how many are *entirely online*?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

What have most of your grades been up to now at this institution?

- A
- A-
- B+
- B
- B-
- C+
- C
- C- or lower

Did you begin college at this institution or elsewhere?

- Started here
- Started elsewhere

Screen 4 of 5

Since graduating from high school, which of the following types of schools have you attended *other than* the one you are now attending? (Select all that apply.)

- ☐ Vocational or technical school
- ☐ Community or junior college
- ☐ 4-year college or university other than this one
- ☐ None
- ☐ Other

What is the highest level of education you ever expect to complete?

- ○ Some college but less than a bachelor's degree
- ○ Bachelor's degree (B.A., B.S., etc.)
- ○ Master's degree (M.A., M.S., etc.)
- ○ Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

What is the highest level of education completed by either of your parents (or those who raised you)?

- ○ Did not finish high school
- ○ High school diploma or G.E.D.
- ○ Attended college but did not complete degree
- ○ Associate's degree (A.A., A.S., etc.)
- ○ Bachelor's degree (B.A., B.S., etc.)
- ○ Master's degree (M.A., M.S., etc.)
- ○ Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

What is your gender identity?

- ○ Man
- ○ Woman
- ○ Another gender identity, please specify:
- ○ I prefer not to respond

Enter your year of birth (e.g., 1994):

What is your country of citizenship? ---

What is your racial or ethnic identification? (Select all that apply.)

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White
- ☐ Other
- ☐ I prefer not to respond

Screen 4 of 5 (continued)

Are you a member of a social fraternity or sorority?

- Yes
- No

Which of the following best describes where you are living while attending college?

- Residence hall, dormitory, or other campus housing (not fraternity or sorority house)
- Fraternity or sorority house
- Residence (house, apartment, etc.) *within walking distance* to the institution
- Residence (house, apartment, etc.) *farther than walking distance* to the institution
- None of the above

Are you a student-athlete on a team sponsored by your institution's athletics department?

- Yes
- No

Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?

- Yes
- No

Have you been diagnosed with any disability or impairment?

- Yes
- No
- I prefer not to respond

Which of the following has been diagnosed? (Select all that apply.)

- A sensory impairment (vision or hearing)
- A mobility impairment
- A learning disability (e.g., ADHD, dyslexia)
- A mental health disorder
- A disability or impairment not listed above

Which of the following best describes your sexual orientation?

- Straight (heterosexual)
- Bisexual
- Gay
- Lesbian
- Queer
- Questioning or unsure
- Another sexual orientation, please specify:
- I prefer not to respond

Continue

Prompt for Additional Comments (Institutions select one of four questions for the end of the NSSE questionnaire.)

If you have any additional comments or feedback that you'd like to share on the quality of your educational experience, please enter them below. (5,000 character limit)

Continue

Screen 5 of 5

What has been most satisfying about your experience so far at this institution, and what has been most disappointing? (5,000 character limit)

Continue

Please describe the most significant learning experience you have had so far at this institution. (5,000 character limit)

Continue

What one change would you most like to see implemented that would improve the educational experience at this institution, and what one thing should not be changed? (5,000 character limit)

Continue

APPENDIX B

Cutchens, Amanda

To: Cutchens, Amanda
Subject: RE: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

From: Cutchens, Amanda
Sent: Thursday, November 16, 2017 3:10 PM
To: 'CPR Item Usage Agreements' <cpritems@indiana.edu>
Subject: RE: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

Good afternoon Christen,

Thank you so much!

Take care,
Amanda Cutchens, Ph.D.
ACADEMIC ADVISOR | UNIVERSITY OF SOUTH FLORIDA
HONORS COLLEGE
4202 E. FOWLER AVE., ALN 241
(813) 974 – 3087

From: Priddie, Christen Audrey [mailto:cpriddie@iu.edu] **On Behalf Of** CPR Item Usage Agreements
Sent: Thursday, November 16, 2017 2:12 PM
To: Cutchens, Amanda <acutchens@honors.usf.edu>; CPR Item Usage Agreements <cpritems@indiana.edu>
Subject: RE: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

Hello Amanda,

Thanks for the clarification. For your intended purposes, you do not need our permission. Good luck with your dissertation!

Best,
Christen

From: Cutchens, Amanda [mailto:acutchens@honors.usf.edu]
Sent: Wednesday, November 15, 2017 10:20 AM
To: CPR Item Usage Agreements <cpritems@indiana.edu>
Subject: RE: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

Hi Christen,

Thank you for your response. I am just attaching the survey to the appendix of my dissertation.

Take care,
Amanda Cutchens, Ph.D.
ACADEMIC ADVISOR | UNIVERSITY OF SOUTH FLORIDA
HONORS COLLEGE
4202 E. FOWLER AVE., ALN 241
(813) 974 – 3087

1

From: Priddie, Christen Audrey [mailto:cpriddie@iu.edu] **On Behalf Of** CPR Item Usage Agreements
Sent: Wednesday, November 15, 2017 10:16 AM
To: Cutchens, Amanda <acutchens@honors.usf.edu>; CPR Item Usage Agreements <cpritems@indiana.edu>
Subject: RE: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

Hello Amanda,

Just needing some clarification. Are you asking to just attach a copy of the survey to the appendix of your dissertation or to use the survey questions and therefore that is why the survey will be attached to the appendix? If you could just provide a little more detail on your usage, that would be helpful.

Thanks,

Christen

From: Cutchens, Amanda [mailto:acutchens@honors.usf.edu]
Sent: Tuesday, November 14, 2017 2:18 PM
To: CPR Item Usage Agreements <cpritems@indiana.edu>
Subject: Copyrighted NSSE Survey Permission for Use in Dissertation Appendix

Hello,

I am writing to request permission for use of the NSSE17_Screenshot_US_English PDF in the appendix of my dissertation. My IRB letter is attached for your review. Please let me know if you need any additional information. Thank you.

Take care,

Amanda Cutchens, Ph.D.
ACADEMIC ADVISOR I UNIVERSITY OF SOUTH FLORIDA
HONORS COLLEGE
4202 E. FOWLER AVE., ALN 241
(813) 974 – 3087

APPENDIX C

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV01

Descriptive Statistics

Dependent Variable: To what extent have events or activities OFFERED AT YOUR INSTITUTION emphasized perspectives on societal differences (economic, ethnic, political, religious, etc.)?

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	2.47	1.051	34
	Hispanic or Latino	2.65	.834	57
	White	2.52	.891	810
	Total	2.52	.894	901
Sophomore/2nd year	Black or African American	2.64	.809	11
	Hispanic or Latino	2.64	.924	11
	White	2.41	.927	118
	Total	2.44	.916	140
Junior/3rd year	Black or African American	2.71	1.069	14
	Hispanic or Latino	2.03	.778	39
	White	2.36	.918	308
	Total	2.34	.917	361
Senior/4th year	Black or African American	2.44	.938	96
	Hispanic or Latino	2.34	.920	210
	White	2.37	.914	1801
	Total	2.37	.916	2107
Unclassified/Other	Black or African American	3.00	.	1
	Hispanic or Latino	2.50	.707	2
	White	2.58	1.027	26
	Total	2.59	.983	29
Total	Black or African American	2.49	.960	156
	Hispanic or Latino	2.37	.901	319
	White	2.41	.912	3063
	Total	2.41	.913	3538

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV02a

Descriptive Statistics

Dependent Variable: Events encouraged understanding of: Economic or social inequality

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1 st year	Black or African American	1.42	.663	33
	Hispanic or Latino	1.72	.840	57
	White	1.63	.800	818
	Total	1.62	.799	908
Sophomore/2nd year	Black or African American	1.73	.905	11
	Hispanic or Latino	1.64	.809	11
	White	1.62	.812	115
	Total	1.63	.814	137
Junior/3rd year	Black or African American	1.71	1.069	14
	Hispanic or Latino	1.49	.721	39
	White	1.63	.843	312
	Total	1.62	.839	365
Senior/4th year	Black or African American	1.75	.878	97
	Hispanic or Latino	1.74	.937	212
	White	1.58	.817	1806
	Total	1.60	.834	2115
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	1.50	.707	2
	White	1.44	.821	25
	Total	1.54	.922	28
Total	Black or African American	1.69	.877	156
	Hispanic or Latino	1.70	.890	321
	White	1.60	.815	3076
	Total	1.61	.825	3553

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV02b

Descriptive Statistics

Dependent Variable: Events encouraged understanding of: Issues of race, ethnicity, or nationality

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	1.74	.931	34
	Hispanic or Latino	1.82	.909	57
	White	1.59	.778	815
	Total	1.61	.794	906
Sophomore/2nd year	Black or African American	1.91	.944	11
	Hispanic or Latino	1.73	1.009	11
	White	1.53	.759	118
	Total	1.58	.796	140
Junior/3rd year	Black or African American	1.93	1.141	14
	Hispanic or Latino	1.45	.724	38
	White	1.57	.820	311
	Total	1.57	.826	363
Senior/4th year	Black or African American	1.75	.936	97
	Hispanic or Latino	1.79	.950	211
	White	1.52	.797	1805
	Total	1.56	.825	2113
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	1.50	.707	2
	White	1.64	.907	25
	Total	1.71	.976	28
Total	Black or African American	1.79	.961	157
	Hispanic or Latino	1.75	.921	319
	White	1.55	.794	3074
	Total	1.58	.817	3550

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV02c

Descriptive Statistics

Dependent Variable: Events encouraged understanding of: Religious or philosophical differences

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	1.56	.746	34
	Hispanic or Latino	1.56	.824	57
	White	1.62	.808	816
	Total	1.61	.807	907
Sophomore/2nd year	Black or African American	1.91	.944	11
	Hispanic or Latino	1.55	.688	11
	White	1.54	.813	118
	Total	1.57	.815	140
Junior/3rd year	Black or African American	1.57	.852	14
	Hispanic or Latino	1.31	.655	39
	White	1.61	.856	312
	Total	1.58	.840	365
Senior/4th year	Black or African American	1.62	.861	96
	Hispanic or Latino	1.69	.926	210
	White	1.55	.819	1804
	Total	1.57	.833	2110
Unclassified/Other	Black or African American	3.00	.	1
	Hispanic or Latino	1.50	.707	2
	White	1.56	.961	25
	Total	1.61	.956	28
Total	Black or African American	1.63	.843	156
	Hispanic or Latino	1.61	.876	319
	White	1.57	.821	3075
	Total	1.58	.827	3550

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV02d

Descriptive Statistics

Dependent Variable: Events encouraged understanding of: Different political viewpoints

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	1.56	.746	34
	Hispanic or Latino	1.74	.936	57
	White	1.64	.786	814
	Total	1.64	.795	905
Sophomore/2nd year	Black or African American	1.73	.905	11
	Hispanic or Latino	1.73	1.009	11
	White	1.58	.790	117
	Total	1.60	.813	139
Junior/3rd year	Black or African American	1.57	1.016	14
	Hispanic or Latino	1.38	.711	39
	White	1.63	.832	311
	Total	1.60	.829	364
Senior/4th year	Black or African American	1.65	.830	97
	Hispanic or Latino	1.75	.943	212
	White	1.61	.839	1804
	Total	1.63	.850	2113
Unclassified/Other	Black or African American	3.00	.	1
	Hispanic or Latino	1.50	.707	2
	White	1.60	.913	25
	Total	1.64	.911	28
Total	Black or African American	1.64	.833	157
	Hispanic or Latino	1.70	.921	321
	White	1.62	.823	3071
	Total	1.63	.833	3549

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV02e

Descriptive Statistics

Dependent Variable: Events encouraged understanding of: Issues of gender or sexual orientation

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1 st year	Black or African American	1.44	.746	34
	Hispanic or Latino	1.77	.964	57
	White	1.54	.778	810
	Total	1.55	.791	901
Sophomore/2nd year	Black or African American	1.82	1.168	11
	Hispanic or Latino	1.64	.809	11
	White	1.45	.750	116
	Total	1.49	.795	138
Junior/3rd year	Black or African American	1.69	1.109	13
	Hispanic or Latino	1.24	.597	37
	White	1.49	.805	308
	Total	1.47	.801	358
Senior/4th year	Black or African American	1.60	.850	97
	Hispanic or Latino	1.58	.860	211
	White	1.43	.763	1800
	Total	1.45	.779	2108
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	1.50	.707	2
	White	1.48	1.005	25
	Total	1.57	1.069	28
Total	Black or African American	1.60	.892	156
	Hispanic or Latino	1.58	.859	318
	White	1.46	.774	3059
	Total	1.48	.788	3533

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV03a

Descriptive Statistics

Dependent Variable: Discussed: Economic or social inequality

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	2.41	.857	34
	Hispanic or Latino	2.46	.927	57
	White	2.34	.871	816
	Total	2.35	.874	907
Sophomore/2nd year	Black or African American	3.00	1.183	11
	Hispanic or Latino	2.64	1.206	11
	White	2.43	.991	118
	Total	2.49	1.028	140
Junior/3rd year	Black or African American	2.43	1.158	14
	Hispanic or Latino	2.18	.854	39
	White	2.41	.972	311
	Total	2.38	.968	364
Senior/4th year	Black or African American	2.51	.903	97
	Hispanic or Latino	2.56	1.008	212
	White	2.50	.957	1808
	Total	2.51	.959	2117
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	3.00	.000	2
	White	2.44	1.044	25
	Total	2.54	1.036	28
Total	Black or African American	2.52	.945	157
	Hispanic or Latino	2.50	.985	321
	White	2.45	.940	3078
	Total	2.46	.945	3556

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV03b

Descriptive Statistics

Dependent Variable: Discussed: Issues of race, ethnicity, or nationality

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1 st year	Black or African American	2.56	.960	34
	Hispanic or Latino	2.42	.963	57
	White	2.28	.870	816
	Total	2.30	.881	907
Sophomore/2nd year	Black or African American	2.82	1.168	11
	Hispanic or Latino	2.64	1.206	11
	White	2.28	.951	118
	Total	2.35	.996	140
Junior/3rd year	Black or African American	2.29	1.267	14
	Hispanic or Latino	1.97	.959	39
	White	2.23	.990	311
	Total	2.21	.999	364
Senior/4th year	Black or African American	2.55	.936	97
	Hispanic or Latino	2.46	1.054	212
	White	2.36	.977	1805
	Total	2.38	.984	2114
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	3.00	.000	2
	White	2.32	1.069	25
	Total	2.43	1.069	28
Total	Black or African American	2.55	.990	157
	Hispanic or Latino	2.40	1.039	321
	White	2.32	.952	3075
	Total	2.34	.963	3553

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV03c

Descriptive Statistics

Dependent Variable: Discussed: Religious or philosophical differences

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1st year	Black or African American	2.35	1.012	34
	Hispanic or Latino	2.51	1.054	57
	White	2.34	.917	814
	Total	2.35	.929	905
Sophomore/2nd year	Black or African American	2.73	1.191	11
	Hispanic or Latino	2.55	1.036	11
	White	2.36	1.021	117
	Total	2.40	1.034	139
Junior/3rd year	Black or African American	2.36	1.277	14
	Hispanic or Latino	2.03	1.038	39
	White	2.32	1.000	311
	Total	2.29	1.017	364
Senior/4th year	Black or African American	2.32	.952	97
	Hispanic or Latino	2.38	1.066	210
	White	2.40	1.013	1804
	Total	2.39	1.016	2111
Unclassified/Other	Black or African American	4.00	.	1
	Hispanic or Latino	2.50	.707	2
	White	2.24	1.052	25
	Total	2.32	1.056	28
Total	Black or African American	2.37	1.015	157
	Hispanic or Latino	2.36	1.061	319
	White	2.37	.988	3071
	Total	2.37	.995	3547

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV03d

Descriptive Statistics

Dependent Variable: Discussed: Different political viewpoints

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1 st year	Black or African American	2.32	1.007	34
	Hispanic or Latino	2.30	1.017	57
	White	2.42	.912	811
	Total	2.41	.922	902
Sophomore/2nd year	Black or African American	2.55	1.214	11
	Hispanic or Latino	2.36	1.206	11
	White	2.36	1.017	118
	Total	2.37	1.041	140
Junior/3rd year	Black or African American	2.21	1.311	14
	Hispanic or Latino	2.15	.875	39
	White	2.42	.977	308
	Total	2.38	.982	361
Senior/4th year	Black or African American	2.30	1.002	97
	Hispanic or Latino	2.42	1.057	212
	White	2.54	.981	1804
	Total	2.52	.991	2113
Unclassified/Other	Black or African American	3.00	.	1
	Hispanic or Latino	3.00	.000	2
	White	2.40	1.080	25
	Total	2.46	1.036	28
Total	Black or African American	2.32	1.038	157
	Hispanic or Latino	2.37	1.032	321
	White	2.49	.966	3066
	Total	2.47	.977	3544

Means for Subgroups Defined by Combination of Academic Rank and Male Ethnic Group DIV03e

Descriptive Statistics

Dependent Variable: Discussed: Issues of gender or sexual orientation

Student reported: What is your class level/current year of study in university?	Institution-reported: Race or ethnicity	Mean	Std. Deviation	N
Freshman/1 st year	Black or African American	2.18	.968	34
	Hispanic or Latino	2.16	1.005	56
	White	2.08	.921	814
	Total	2.09	.927	904
Sophomore/2nd year	Black or African American	2.36	1.286	11
	Hispanic or Latino	2.45	.934	11
	White	2.14	1.067	115
	Total	2.18	1.073	137
Junior/3rd year	Black or African American	2.29	1.267	14
	Hispanic or Latino	1.77	.902	39
	White	2.10	.970	307
	Total	2.07	.979	360
Senior/4th year	Black or African American	2.19	.905	97
	Hispanic or Latino	2.13	1.005	211
	White	2.19	1.003	1800
	Total	2.18	.999	2108
Unclassified/Other	Black or African American	3.00	.	1
	Hispanic or Latino	3.00	.000	2
	White	2.04	1.060	25
	Total	2.14	1.044	28
Total	Black or African American	2.21	.974	157
	Hispanic or Latino	2.11	.996	319
	White	2.15	.982	3061
	Total	2.15	.983	3537

APPENDIX D

USF
UNIVERSITY OF
SOUTH FLORIDA

RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

4/14/2017

Amanda Cutchens
L-CACHE - Leadership, Counseling, Adult, Career & Higher Education
Tampa, FL 33612

RE: **Not Human Subjects Research Determination**
IRB#: Pro00030573
Title: Understanding the Relationship between Informal Interactional Diversity and Males' Engagement in the Undergraduate Experience

Dear Ms. Cutchens:

The Institutional Review Board (IRB) has reviewed your application and determined the activities do not meet the definition of human subjects research. Therefore, this project is not under the purview of the USF IRB and approval is not required. If the scope of your project changes in the future, please contact the IRB for further guidance.

All research activities, regardless of the level of IRB oversight, must be conducted in a manner that is consistent with the ethical principles of your profession. Please note that there may be requirements under the HIPAA Privacy Rule that apply to the information/data you will utilize. For further information, please contact a HIPAA Program administrator at 813-974-5638.

We appreciate your dedication to the ethical conduct of research at the University of South Florida. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

Kristen Salomon, Ph.D., Vice Chairperson
USF Institutional Review Board