INTERRACIAL CONTACT: THE IMPACT ON UNDERGRADUATE BUSINESS STUDENTS RACIAL PERCEPTIONS

By

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ABSTRACT

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The impact of interracial interaction has been looked at from a myriad of approaches and different populations; time and time again researchers have found similar results showing a wide variety of personal, institutional, and societal benefits are correlated to interactions with diverse individuals. Wishing to further examine the impact of interracial interaction, I set out to explore the relationship between frequent and positive interracial contact and business students' racial perceptions. In order to investigate this potential relationship, the following research question was investigated: do undergraduate business students who have frequent and positive interracial interactions exhibit more of less positive racial perceptions of other races? Participants included 910 domestic undergraduate business students enrolled at a large public research university in the Midwest.

A structured web-based quantitative survey design was used to answer this question. Measures include students' perceptions/attitudes toward other racial groups (dependent variable), the opportunity for contact, frequency of contact, and quality of contact (independent variables), and various demographic variables designed to collect information ranging from students' age and gender to their hometown and parents education level.

Data was analyzed using t-test and ANOVA statistical procedures. The final results of this study indicate that business students who have frequent (weekly or daily) and positive interracial interactions typically possess more positive racial perceptions than their peers whose interactions are infrequent (never, once or twice a year or semester) and less positive. More

specifically, the findings show that (1) business students who reported more opportunities for contact (i.e., structural diversity) generally had moderately more positive racial perceptions than students who reported having less opportunity for interracial contact, (2) business students who identified interacting frequently (weekly or daily) with members of other racial groups possessed moderately more positive racial perceptions than students whose interactions were less frequent (never or once or twice a year/semester), (3) business students who rated their overall interracial experiences to date as positive or very positive held significantly more positive racial perceptions than students who rated their interracial interactions as neutral, negative or very negative, and (4) a business student's race significantly influences his or her racial attitude.

DEDICATION

I dedicate this work in loving memory of my Grandmother Beatrice Constance Leonard. Because you were never provided the opportunity of a formal education, this degree is for you. I love and miss you greatly.

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CHAPTER ONE

INTRODUCTION

The United States, its workforce, and colleges/universities are becoming increasingly diverse. Unfortunately, racial tensions have also been on the rise throughout society, within our work environments, and on our college campuses. Confronted with this rise in racial tensions, societal and business leaders have looked to our universities to prepare students to be active participants in this increasingly heterogeneous society and workforce (Bowen & Bok, 1998; Association of American Colleges and Universities, 1995; Bikson & Law, 1994). Subsequently a wide range of scholars (Chang, 2001, 2002; Gurin, Dey, Hurtado, & Gurin, 2002; Whitt, Edison, Pascarella, Terenzini, & Nora, 2001) assert that the increasing enrollments of underrepresented groups on our college campuses provide these institutions with the opportunity to tackle the issue of prejudice and better prepare students to live and work in a diverse and global society (Pike & Kuh, 2006). This stance is grounded in a wealth of research (Milem, 1994; Pettigrew, 1998; Pettigrew & Tropp, 2006; Sigelman & Welch, 1993; Tropp, 2007) stemming from a sociological theory developed by Gordon Allport (1954) called the "contact hypothesis", which contends interaction with individuals from different racial groups can reduce prejudice and discrimination. However, the benefits of a diverse campus have come under attack by opponents who argue that diverse student bodies and learning environments provide very little educational benefit and can actually worsen relations between groups (Wood & Sherman, 2001; Bloom, 1987; D'Souza, 1991). Therefore, the purpose of this study is to assess the impact interracial contact has on students' perceptions of other racial groups, specifically focusing on undergraduate business students at a large Midwestern university. The study employs the contact hypothesis as a theoretical framework by which to examine the following question: Do undergraduate business

students who have more frequent and positive interracial interactions exhibit more or less positive racial perceptions of other races?

Problem Statement

The United States has seen a significant increase in the racial diversity of its population over the past century. The U.S. population grew by 2.8 million people between 2004-2005 and minorities accounted for approximately 81% of this growth (U.S. Census Bureau, 2006). As of 2005 minorities represented approximately 33% of the U.S. population, by 2020, it is expected that minorities will constitute 39% of the U.S. population, and that by 2050 racial minorities will represent almost half of that same population (NCES, 2007; U.S. Department of Labor, 2001). As the U.S. has increased in diversity so too have its colleges and universities. Between 1976 and 2004, minority undergraduate enrollments increased from 17% to 32 % (NCES, 2007). It is estimated that by 2015 historically underrepresented racial groups will make up approximately two fifths of undergraduate enrollments (Carnevale & Fry, 2000) and that shortly after 2020 minority students will, for the first time in history, outnumber Whites on college campuses (Van Der Werf & Sabatier, 2009). The U.S. workforce (people generally between the ages of 25-64) is also in the midst of a comprehensive demographic transformation. The National Center for Public Policy and Higher Education (NCPPHE) estimates that between 1980 and 2020 the White working-age population will decline from 82% of the workforce to 63%, while the minority portion of the workforce will double from 18% to 37% (2005).

Some see this shift in the demographic makeup of society, especially as it pertains to higher education and the U.S. labor force, as a move in the right direction. In a review of the research examining the benefits of diversity within higher educational, Milem and Hakuta (2000) discovered that a diverse student body enriches the learning and lives of individual students, the

institutions themselves, the economy/private enterprise, and larger society. For instance, students who reported increased levels of contact with diverse ideas and people showed growth in their cognitive and active thinking processes (Gurin, 1999). Others have shown that diversity has a transformative effect on colleges and universities by enriching their educational mission and changing what is taught, who teaches it, and how it is to be taught (Chang, 1999). At the societal level, research has shown that diverse institutions better prepare students to become active and involved citizens in an increasingly complex, diverse, and global society (Bowen & Bok, 1998; Gurin, 1999). Additional research points to the influence a diverse college environment has on students' perceptions, beliefs, values, and behaviors regarding race and diversity. For instance, Astin (1993a) and Pascarella and Terenzini (1991) indicated that during college, students who engage diverse peers tend to develop more tolerant views of diversity and individual differences often carrying these attitudes with them after graduation (Whitt, et al., 2001). Chang (1996) indicated that a more diverse student body tended to lead to increased socialization across races which Astin (1993a) reported leads to increased cultural awareness and racial understanding. More recent studies point to the consistent role interaction with diverse peers' plays in developing students with increased cultural awareness and other multicultural competencies (e.g., Chang, Denson, Saenz, & Misa, 2006, Engberg, 2007, Hurtado, 2003, 2005, Jayakumar, 2008).

From a corporate perspective, research has provided evidence that companies employing diverse workforces enjoy a competitive advantage over less diverse competitors (Cox, 1993). "For example, the 50 companies recognized by *Fortune* Magazine in 1998 as the best places for racial minorities to work had a total five-year return to shareholders of 201 percent versus 171 percent for the S&P 500" (Salomon & Schork, 2003, p.38). Since the early 1990's, business leaders have recognized that to be competitive in a global market, they must diversify their

workforce while learning to effectively manage that workforce to take advantage of the benefits a diverse workforce brings (Cox & Blake, 1991; Buttner, Lowe, & Billings-Harris, 2006; Salomon, et al., 2003). For most corporations, the primary drivers for diversity are: enhanced access to a broader talent pool, improved innovation, stronger customer relations, improved productivity, increased speed and agility, and stakeholder demand (Salomon, et al., 2003). However, the competitive advantage a diverse workforce brings to a company still remains the principal reason corporations have begun to embrace diversity. Cox, et al. (1991) identified six primary areas where diversity gives a corporation a competitive advantage: cost, resource acquisition, marketing, creativity, problem solving, and organization flexibility. From a cost perspective, those companies that fail to manage a diverse workforce face the added costs associated with discrimination lawsuits, high employee turnover, and retraining. Employees are one of every corporation's key resources. Those companies who earn a reputation as being favorable places for diverse populations to work gain an edge over their competition by being able to secure the top talent from the labor pool (Carr-Ruffino, 2005; Cox, 1993). The cultural sensitivity and insight about untapped populations and markets diverse employees bring with them also enhance the marketing efforts of a company (Carr-Ruffino, 2005; Cox, 1993). Diversity also adds to the number of perspectives at the table allowing for a level of untainted creativity that can give a corporation an advantage over their competitors (Carr-Ruffino, 2005; Cox, 1993). Heterogeneous groups also improve the decisions made by companies regarding problems or challenges they are facing (Carr-Ruffino, 2005; Cox, 1993). Lastly, a management model based on effectively managing a diverse population creates a corporation that can fluidly adjust to other environmental factors and changes they will encounter (Carr-Ruffino, 2005; Cox,1993).

However, the shift in the racial makeup of society has also created challenges for higher education and corporate America. As the U.S. has increased in diversity, so have the number of reported racial, sexual, and religious based hate crimes (Potok, 2012). Hate crimes are defined as any crime motivated by hostility towards the victim because of his or her membership in a group based on characteristics such as skin color, gender, sexual orientation or religious belief. The Southern Poverty Law Center (SPLC), a civil rights organization that tracks hate crimes and groups throughout the U.S., reported that between 2000 and 2011 hate groups increased from 602 to 1018; an increase of over 59% in eleven years (Potok, 2012). The FBI reported an increase in hate crimes of 2% from 7,624 to 7,783 between 2007 and 2008 (Federal Bureau of Investigation Uniform Crime Report, 2010). Unfortunately, the aforementioned increase in racial tension and hate crimes has not been restricted to mainstream society. As our colleges and universities, historically viewed as establishments of understanding and tolerance, have become more heterogeneous there has been an increase in racial tensions, racially motivated incidents and voluntary racial segregation on many campuses. Levine and Cureton (1998) reported that 41% of surveyed deans noted increased tension on campus regarding issues of diversity and that three out of every five campuses identified issues surrounding diversity as the main source of conflict between students. The same study found that 35 % of all colleges and universities surveyed reported having specific locations on campus, such as dorms or dining facilities, which belonged to certain racial groups (Levine et al., 1998). This voluntary self-segregation has become so common that it is reported occurring on campuses throughout the U.S. (Chau, 2004; Li, 2012; The Chronicle, 2013). In addition, the SPLC reported that college campuses are the third most common setting for hate crimes (SPLC, 2005). Regrettably for employers, the attitudes students' form in college often follows them to the workforce where reports of workplace discrimination

have been on the rise. Despite the enforcement of laws such as Title VII of the Civil Rights Act, the Equal Pay Act of 1963, Age Discrimination in Employment Act of 1967, and the Americans with Disabilities Act, the number of employment discrimination charges filed reached a record high of 99,922 in 2010 (Wong, 2011). There is also a price to be paid for workplace discrimination. It is estimated that workplace discrimination costs American corporations approximately $64 billion a year (Burns, 2012). This hefty price tag represents the annual estimated cost of losing and replacing more than 2 million American workers due to workplace discrimination or suppressed job performance and the associated court costs and settlements (Burns, 2012).

The financial benefits of a diverse workforce and the financial costs and loss of productivity associated with rising workplace discrimination have clearly grabbed corporate America's attention. As corporations have become aware of the impact diversity has on their bottom line they have begun to articulate to educators a set of workplace competencies or skill sets corporate leaders feel are necessary for students to possess in order to traverse a diverse workforce and society (Bikson et al., 1994; Engberg & Hurtado, 2011). These diverse workforce competencies include the ability for students to see the world from multiple perspectives, tolerance of different beliefs, openness to having one's views challenged, ability to work cooperatively with diverse people, and the ability to navigate difficult and sometime controversial issues (as cited in Engberg et al, 2011). Corporations are extremely serious about being able to secure employees with these aforementioned skill sets. As corporations have become cognizant of the competitive advantage a diverse workforce gives them, many corporations have ceased recruitment activities and funding at universities whose students they feel lack the cultural

competencies to work with and lead diverse groups of people (Contreras, 2007). In a word, this is also becoming a bottom line issue for higher education.

Although students can and often do develop these skills on the job, higher education plays an important role in the acquisition of diverse competencies and skill sets (Engberg et al, 2011). Universities serve as a setting where various forms of knowledge converge, different perspectives are fostered, and students encounter racial/ethnic diversity and divergent viewpoints for the first time (Engberg et al., 2011). However, questions continue to persist as to whether colleges and universities are capable of developing students with the competencies needed to navigate a diverse workforce and society. In Bikson and Law's (1994) study of sixteen corporations and sixteen academic institutions, the researchers found that corporations felt universities were failing to develop students who could effectively lead and work with individuals whose ideals, values, norms, belief systems, and life styles were different from their own. However, the Association of American Colleges and Universities (AAC&U) disagree with this stance; they believe that colleges and universities are uniquely positioned "by their mission, values, and dedication to learning, to foster and nourish the habits of heart and mind that Americans need to make diversity work in daily life" (AAC&U, 1995, p. xvi). In addition, most educators still view the mission of higher education to be the development of cognitive and interpersonal skills within their graduates that prepare these students for work and citizenship in a diverse modern society (Engberg et al, 2011). In fact, higher education administrators typically support the increased diversification of their colleges and universities, siding with the aforementioned research that points to racially diverse student bodies being instrumental in preparing students to be effective and responsible citizens of a multicultural and global society (antonio, 2001b).

Understanding the benefits of diverse student populations and the need to develop students with the skills necessary to navigate a diverse workforce and society, institutions of higher education have begun to work on improving the diversity of their campus. To assist in the diversification of these traditionally homogenous communities, educators have often turned to affirmative action programs. "Affirmative action programs grew out of democratic principles concerning equity and social justice" and were designed to offset the damage caused by discriminatory practices and policies existing within colleges and society (Milem, et al., 2002, p. 390). Proponents of affirmative action argue that affirmative action policies are still necessary to remedy past and present discrimination within higher education and society (Gurin, et al., 2002). These attitudes are due in large part to the fact that although enrollment and retention rates for minorities have improved, the gap between White and Latino, Black, and American Indian student participation and degree completion rates continues to widen (Almanac of Higher Education, 2008; Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; NCES, 2010). Furthermore, a large percentage of the growth that does exist in minority student enrollment has been in American Indians, Latinos, and Blacks enrolling at two-year colleges, where students tend to be less likely to obtain a bachelor's degree (Bernstein & Eaton, 1994; Fry 2010).

Over the last two decades, research regarding diverse campuses, and the affirmative action policies used to create them, has come under attack throughout the United States. Affirmative action opponents contend that such policies impede the formation of a race-blind society and may even harm those it is supposed to help (Hinrichs, 2009). Others argue that diverse student bodies and learning environments provide very little educational benefit and do not improve relations between groups (Bloom, 1987; D'Souza, 1991; Wood & Sherman, 2001). Many even go as far as stating that affirmative action policy is inequitable and discriminatory in nature (D'Souza, 1991).

Since affirmative action was first challenged but upheld in the *1978 Regents of the University of California v. Bakke* case, the use of affirmative action in college admissions has since been banned by ballot initiatives in California, Washington, Michigan, and Nebraska, and by state legislative action in Florida and Texas and is facing similar challenges in other states.

With rising racial tensions in society and on college campuses, with corporate leaders calling on educators to help develop students with the cultural and racial competencies necessary to work in an increasingly diverse workforce, and the existence of a wide array of research that clearly supports the positive impact a diverse student body has in helping educators develop students with the cultural and racial competencies employers and society needs, why have opponents of affirmative action had such success in challenging and banning its use in college admissions? Partly because there has been research, although limited, that entirely or partially does not support diverse learning environments (Ford, 1973; Jackman & Crane, 1986; Welch & Sigelman, 2000) and to a certain extent, because the debate over affirmative action is more often won in the court of public opinion than in a court of law or the halls of academia. The debate over affirmative action has unfortunately been convoluted and distorted by numerous public figures who have reinforced the various myths and misconceptions held by the American people about Affirmative Action and the benefits of racial diversity in higher education (Milem, et al., 2002). Considering the challenges diversity initiatives continue to face, it would appear that additional research is needed to support the efforts of educators and corporate leaders who continue to see the essential role diversity plays in developing future citizens and employees with the cultural and racial competencies and attitudes necessary to navigate an increasingly diverse workplace and society.

Purpose of Study & Research Question

The purpose of this study is to assess the influence interracial contact has on students' perceptions of other racial groups, specifically focusing on domestic undergraduate business students at a large Midwestern university. The study employs the contact hypothesis as a theoretical framework through which to examine the following question:

1. Do undergraduate business students who have more frequent and positive interracial interactions exhibit more or less positive racial perceptions of other races?

Introduction to Theoretical Framework

The current study is grounded in the intergroup contact theory because it is my goal to assess how interracial contact impacts students' perceptions of individuals from different racial backgrounds. One of the primary theories regarding the reduction of prejudice has been the intergroup contact hypothesis (Allport, 1954). The essence of the contact hypothesis is that racism and prejudice are the result of a lack of knowledge of and exposure to different racial groups. The intergroup contact hypothesis suggests that the more contact that occurs between individuals from different racial groups the more these individuals can learn about one another, which in turn leads to a reduction of their negative beliefs and feelings towards other groups. In 1954, Allport added four conditions needed in order for intergroup contact to facilitate positive attitudinal outcomes. These include all group members being of equal status, a shared common goal or task, the support of authoritative figures, laws, or customs, and intergroup cooperation.

A significant amount of research has been conducted on the intergroup contact hypothesis and the conditions necessary for contact to be successful (Jackman & Crane, 1986; Pettigrew & Tropp, 2006, Tropp, 2007). Chang (1996) found that a diverse student body tended to lead to increased socialization across races, and Astin (1993) reported that socializing with a person of a

different race often increased cultural awareness and racial understanding for these students. Pettigrew (1998) argued that a significant portion of the research on interracial contact clearly supports its ability to reduce prejudice and intergroup bias. Further details and additional research on the intergroup contact hypothesis will be provided in Chapter two.

Significance of Study

The diversification of the U.S., its workforce, and institutions of higher education will only continue to increase in the coming decades. Unfortunately, the reports of racial incidents and discrimination lawsuits will also likely continue to increase unless something is done to lessen these racial tensions. Two leading educational associations (Association of American Colleges and Universities, 2002; National Association of State Universities and Land-Grant Colleges, 1997) assert that it is the duty of institutions of higher education to provide educational environments that promote increased civic responsibility and ethical behaviors amongst its students, thus helping develop citizens capable of negotiating a racially and globally diverse society (Mayhew & Engberg, 2010). If one of the key missions of institutions of higher education continues to be the development of democratic minded leaders for an increasingly heterogeneous workforce and society, then providing an environment for students that can lessen racial tensions will be of utmost importance.

One of the suggested solutions for reducing racial tension has been to increase interaction amongst different racial groups. Over 55 years ago, Allport (1954) proposed that interactions between different racial groups would lead to reductions in prejudice and discrimination (Cowan, 2005). Since then, a slew of researchers have conducted studies supporting Allport's "contact hypothesis" that contact with peers from different racial and ethnic backgrounds increases the chance for interracial interaction, which in turn has been shown to positively impact individuals'

perceptions, beliefs, values, and behaviors regarding race and diversity (Chang, 2001). A recent review by Pettigrew and Tropp (2006) of over 500 studies found that interracial contact clearly has the ability to reduce prejudice and intergroup bias. Nevertheless, there exists a small contingent of researchers who continue to question and challenge the benefits of diverse educational institutions, the true impact interracial contact has on racial attitudes, as well as the affirmative action admissions and hiring policies used to diversify college campuses (D'Souza, 1991; Jackman & Muha, 1984; Rothman, Lipset, & Nevitte, 2003; Sowell, 1989).

One reason for these questions continuing to persist could be inconsistencies in the findings of prior interracial contact research. For instance, Forbes (1997) reviewed over 40 studies on the impact of interracial contact on racial perceptions and found that 90% of these studies supported the theory that positive attitudes were often the result of contact (Forman & Ebert, 2004). Whereas, after a review of over 50 articles on the contact hypothesis, Ford (1986) posited that the findings did not provide enough evidence to reach the conclusion that interracial contact reduced tension and prejudice (as cited in Forman et al., 2004). For this reason, some of the significance of the current study is the need for additional research that addresses the feasibility of interracial contact to reduce racial prejudice and bias.

Some also see such research as one of the few ways left to defend race-conscious admission and hiring practices that have been crucial to helping increase the diversity of college campuses across the country (Milem, et al., 2002). Thus, the current study can provide additional support for those states and universities where affirmative action admission policies are coming under attack. The more research that supports the impact cross-racial interaction and racially diverse learning environments have on reducing racial bias, the harder it will be for critics of affirmative action and other racial diversity initiatives to sway public opinion against the

implementation of policies and support programs geared towards creating racially diverse college campuses, classrooms, and living environments.

Today's college students are also the future voters and policymakers who will determine which policies are adopted by society. Studies have shown that a student's racial attitude often has a direct impact on his or her views regarding policies focused on achieving racial equality in society (Inkelas, 2000; Sax & Arredondo, 1999). Therefore, additional research that helps increase understanding as to the role interracial contact has on students' racial attitudes can be useful to educators who are responsible for developing citizens with the understanding and capacity to govern and lead in an increasingly diverse and democratic society.

Current students are also our future workforce and business leaders. Studying undergraduate business student's attitudes towards other racial groups is important because the attitudes these individuals possess are likely to travel with them into the workplace (Buttner, et al., 2006). Currently little research exists examining the racial attitudes/perceptions of this population. Therefore, this study can provide useful information to both educators and corporations seeking to respectively graduate students and hire employees capable of adapting to a more diverse and global workforce.

Lastly, as researchers over the years have added more situational factors in order for optimal contact to occur, Allport's hypothesis has also become less applicable to most interracial contact situations (Pettigrew, 1998). Too many factors end up excluding most interracial situations, which can result in the hypothesis rarely predicting positive results from contact, even though research has typically found positive results (Pettigrew, 1998). What Pettigrew (1998) found was that "most studies report positive contact effects, even in situations lacking key conditions" (p. 68). Because of these findings, some researchers have suggested that future

studies should focus on creating a broader variety of measures of interracial contact (Forman & Ebert, 2004; Wood and Sonleitner, 1996). For this reason, the current study will focus less on the aforementioned situational factors and more broadly analyze students' interracial contact by looking at how the opportunity for contact, frequency of contact, and quality of contact affect students' racial perceptions of diverse others.

Definitions

The following items are terminology commonly used in the discussion of contact theory and diversity and will be used frequently in this study.

Diversity: Considering that the focus of this study will be on the influence racial diversity has on students' perceptions of other racial groups, it seems important to define the meaning of diversity. Building upon the work of Gurin (1999), Chang (1999) and Milem, et al. (2002) this study identifies three types of diversity that impact students. These are structural diversity, interactional diversity, and curricular/co-curricular diversity. *Structural diversity* refers to the numerical representation of students from different racial groups. *Interactional diversity* characterizes students' exchange of information, ideas or experiences with people from different racial groups. *Curricular/Co-curricular diversity* refers to students' exposure to different races through the formal classroom or workshops that focus on cultural awareness or ethnic studies.

Interracial Interaction/Contact, Cross-Racial Contact/Interaction, and Intergroup Contact/Interaction: Each of these terms will be used interchangeably throughout this study and when used will refer to the opportunity for contact or interaction occurring between individuals or groups of individuals and different races or racial groups through various forms of diversity. These terms can refer to how frequently respondents have dated, studied, discussed racial issues,

or taken time to learn more about someone of a different race with someone outside of their defined racial identity.

Minority or Students of Color: Although broad in definition, for the purposes of this study minority, minorities, and students of color will refer to a group of people who differ racially from the dominant group in society. When used in this study, it will refer to people who are of American Indian, Black, Asian, Latino/Chicano, or Bi-racial ancestry.

Race: Race is viewed from an anthropological perspective within this study. When used it will be referring to an arbitrary classification of people, based on a combination of various physical characteristics, primarily skin color.

Racism: Is a belief that some races have distinct cultural characteristics that make them superior to others, which often leads to abusive behavior, hatred or intolerance towards these other races.

Affirmative Action: A great deal of the confusion over affirmative action rests in a misunderstanding of how it is defined. To help clarify for readers what is meant when affirmative action is referred to in this study, affirmative action will be defined as it is by the American Psychological Association (1999): Affirmative action is a remedy for both past and continuing discrimination based on race, ethnicity, and gender. Affirmative action policies seek to put in place voluntary and mandatory efforts by federal, state, and local governments, private employers, and schools that combat discrimination, foster fair hiring practices, and ensure the advancement of qualified individuals.

Democratic Citizen: Advocates who support diverse learning environments and interracial interaction argue that experiences with diversity educate and prepare students to become citizens of a multicultural democracy. In other words, to be democratic citizens (i.e., individuals prepared

to embrace an egalitarian society in which all members enjoy equal social, political, and economic rights and opportunities regardless of their race, gender, ethnicity, religion or other traits and characteristics).

Dissertation Overview

The following chapters of this study provide a review of relevant literature, the research methodology employed, findings of the study, and discussion of the implications of the data. Chapter two provides the context of the study through a review of the literature concerning the diversification of the American higher education system, the benefits of a diverse campus, a historical overview of Gordon Allport's Contact Theory, and analysis of the existing and relevant research on interracial interaction and college students. Chapter three identifies the research methodology employed in this study and the reasons for its implementation. Chapter four presents readers with findings based on survey data collected from business students enrolled at a large public Midwestern University. The final chapter discusses the primary interpretations, implications, limitations, and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of the literature on which the current study is grounded. The following literature review is presented in two parts. Part I provides an historical overview of the diversification of the U.S. higher education system, the effect this diversification has had on colleges and universities, and reviews the challenges a racially diverse campus creates for educators and administrators. In addition, I will examine the arguments surrounding the benefits of a racial diverse campus, the influence a diverse student body has on an institution's climate, and the role higher education has in preparing their students for the rapidly diversifying workforce. In Part II, a review of the theoretical framework upon which this study is grounded is discussed. I will provide an historical overview of the intergroup contact theory, which is a social psychological theory that posits interaction occurring under appropriate conditions between racially dissimilar groups or individuals leads to reduced prejudice and improved interactions, followed by a review of the existing research on intergroup contact theory as it pertains to reducing racial bias and prejudice amongst college students. Lastly, I will analyze a select group of studies in greater detail that examine how interracial contact impacts how students view and engage individuals from different racial groups during and after college.

Part I: Racial Diversification of Higher Education

U. S. Institutions of Higher Education 1636 - 2012

Although U.S. institutions of higher education are more racially and ethnically diverse than at any other time in their storied history this diversification is a relatively recent development. From the founding of America's first university, Harvard, in 1636 until after the Civil War, nearly all minorities and women were excluded from obtaining a college education

(Anderson, 2002). During this time period most American colleges and universities were privately funded institutions whose primary purpose was the education of society's elite. Oberlin College was one exception; opening its doors in 1833 Oberlin admitted its first Black students in 1835 and by the 1840s and 1850s achieved average Black enrollment rates of between 4 and 5 percent (Anderson, 2002). Nonetheless, educational historians estimate that during the first 230 years of the U.S. higher education system (1636-1866), fewer than 30 Black students graduated from the existing colleges and universities (Sollors, Titcomb, & Underwood, 1993).

The shift of the U.S. educational system from one composed mostly of elite privately funded institutions to one comprised of institutions primarily funded by the public through taxes transformed the landscape of American higher education. Immediately following the Civil War and continuing through World War I (1866-1919), an increasing number of higher educational institutions were opened throughout the United States (Anderson, 2002). A significant portion of this growth was spurred by the passing of the Morrill Act of 1862, which established the creation of numerous land-grant colleges whose focus would be "serving the educational, cultural, economic, and political interests of various local and state constituencies" (Anderson, 2002, p. 5). Although enrollments in higher education grew rapidly during this time, increasing from approximately 2,243 students in 1882 to over 135,000 enrolled students by 1916, the racial composition of these institutions changed little with Blacks and other non-White groups continuing to be excluded from participation in the American higher education system (Anderson, 2002).

The exclusion of minorities from White institutions of higher education continued to be supported by the *Jim Crow* laws of the southern states and the institutionalized racism of the northern states for another five decades. The ruling in the 1896 Supreme Court case, *Plessey v.*

Ferguson, helped to reinforce the continued segregation of America's higher education system. *Plessy* created a legal foundation for what at the time were only state or local segregation laws. *Jim Crow* laws were state and local laws enacted largely by southern states between 1876 and 1965 that mandated a legal right for racial segregation of all public facilities, with a clause for "separate but equal" treatment for Blacks and other minorities. In reality, Blacks and minorities were subjected to horrific discrimination and provided inferior accommodations compared to those of Whites, especially when it came to institutions of higher education. Unlike their southern counterparts, institutions of higher education in the north did not have laws to keep Blacks and other minorities from enrolling or teaching at their institutions. Instead, they relied on an equally effective tool known as institutional racism. Anderson (2002, p. 3) describes institutional racism as a "form of ethnic discrimination and exclusion through routine organizational policies and procedures that do not use ethnicity or color as the rational for discrimination, but instead rely on non-racist rationales to effectively exclude members of ethnic minority groups."

As a result of these laws and policies, the higher education of minorities took much different paths than those of Whites. For instance, Blacks seeking advanced education from 1866 until well after World War II had little choice but to enroll in what have come to be known as Historically Black Colleges and Universities (HBCUs). Initially, mainly northern missionary societies and abolitionists established Black colleges. Unfortunately, many of these institutions were poorly funded and often focused on the assimilation of Blacks so that they were more acceptable to Whites (Brazzell, 1992). Publicly funded Black colleges did not come to fruition until after the *Gaines* decision of 1938, which ordered institutions either to admit Blacks or to provide them another school of equal stature within their state borders. However, the few public

institutions that were created to serve Blacks following the *Gaines* decision were marginalized and inferior colleges compared to existing White institutions (Anderson, 2002) largely due to pressure placed on political leaders by White citizens in the south who feared that providing Blacks with an equal education would lead to Blacks demanding social equality (Anderson, 2002). So although these institutions played in important role in the education of Black Americans, for decades most of these institutions were limited by states to providing their students with no more than an elementary or secondary level education (Anderson, 2002). Native and Chicano Americans struggling to obtain an equitable education shared many similarities with those of Black Americans. Two of the more notable similarities were that few of these colleges provided collegiate level courses and most were founded with the goal of assimilating Chicano or Indigenous populations (see Belgrade, 1992 and Moreno, 1999 for more in-depth discussion).

Unfortunately, this pattern of segregation and racial discrimination remained unchanged from the 1930s through the early 1970s. Even after the passing of *Brown v. the Board of Education* in 1954, which legally mandated the admission of minorities to White colleges and universities in the southern states, it took almost two decades before minorities were admitted with regularity to all White colleges or universities (Anderson, 2002). However, by the late 1960s and early 1970s the racial landscapes of American institutions of higher education began to change. For instance, African American enrollment at Harvard rose from about 100 students in 1961 to 1000 students by 1973 (Weinberg, 1977). In addition, "by 1968 almost half of the nation's colleges and universities were making some efforts to recruit and provide financial assistance to students of color" (Anderson, 2002, p. 10). Although there were numerous forces at work that led to this increased access for minorities, the civil rights movement played an

integral role. As the civil rights movement grew to include racial groups beyond Black Americans and social unrest increased, it became clear to government officials that something would need to be done to address the longstanding and entrenched practices and policies that for centuries had kept minorities from having more than limited access to educational, political, economic, and social institutions (Anderson, 2002).

The something would come in the form of one of the most heralded pieces of legislation in the history of the United States. In his 1963 civil rights speech, John F. Kennedy called for the creation of a body of law that would ban racial discrimination throughout the United States. However, due to President Kennedy's assassination in November of 1963, President Lyndon B. Johnson saw to the creation and implementation of this legislation, which has become known as the *Civil Rights Act of 1964*. Historically, various legislative acts had been passed to address the inequalities that existed for minorities in society; the Civil Rights Act of 1964 would be the first to succeed. The Act officially outlawed all major forms of discrimination throughout the United States. Schools, employers, government agencies and public businesses could no longer discriminate against individuals because of their race. The Act also invalidated the *Jim Crow* laws of the south, beginning the elimination of segregation for races in schools, housing and employment. As a result, enrollments of minorities in higher education institutions surged, beginning the creation of a mosaic on college campus never seen in the history of the American higher education system.

Even though slow in coming, the four decades since the *Civil Rights Act of 1964* have seen a rapid shift in the racial composition of U.S. institutions of higher education. Some of this growth can be attributed to minorities finally being able to enroll in White colleges and universities, but it has also been fueled by the fast changing racial composition of the United

States that has led to an increased number of racially diverse college age youth (Keller, 2001; NCES, 2007). For instance, between 1984 and 1994, minorities on college campuses increased by over 60% whereas White student enrollment only increased by 5% (Pascarella & Terenzini, 1998). The National Center for Educational Statistics (NCES) has predicted that the steady increase in college-bound students will continue into the next decade and that most of this growth will be in the form of minority and other historically underrepresented groups (2007). An examination of enrollment rates between 1976 and 2004 demonstrates that in less than three decades, minorities went from accounting for 17% to approximately 32% of the total undergraduate enrolled population (NCES, 2007). This growth is not slowing down. The Educational Testing Service estimates that by 2015 approximately 80% of the predicted 2.6 million new college students will be of a race other than White (Carnvale & Fry, 2000).

This shift in the makeup of the student body has had a significant effect on institutions of higher education. One of the most notable effects has been the increase in racial tensions among students across college campuses and universities. The following section provides an overview of how these tensions have affected institutions of higher learning.

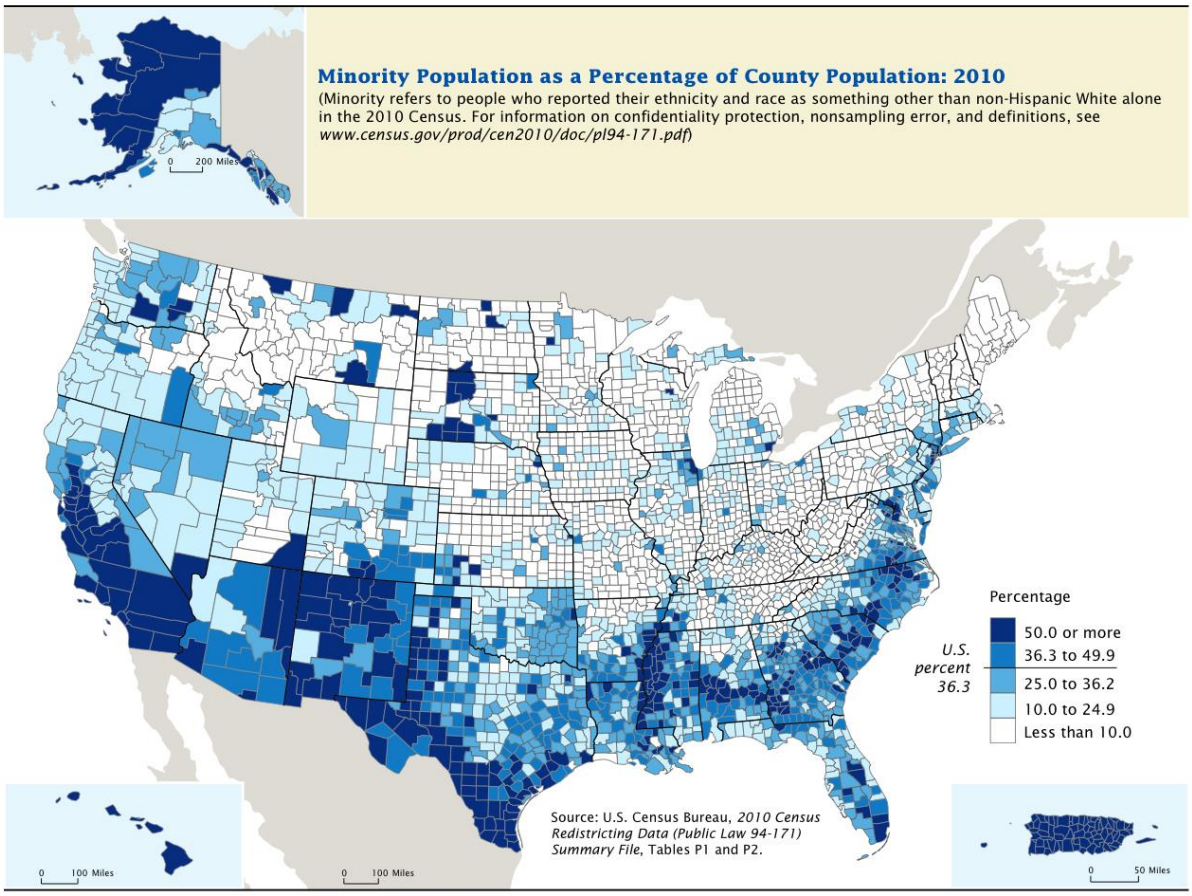
Impact of Racial Tensions on College Campuses

Even though our colleges and universities have become increasingly diverse, society as a whole still remains relatively segregated. Whites, Blacks, Hispanics, and Asians still largely reside in neighborhoods and attend schools with racial compositions similar to their own (Orfield & Lee, 2006; Reardon & Yun, 2002). Frankenberg, Lee, and Orfield (2003) found that 72% of Blacks and 76% of Hispanics attend high schools where half or more of the student body was not White, whereas only 11% of Whites attended schools that were predominately non-White (Frankenberg, Lee & Orfield, 2003). The following map of the United States (Figure 1) provides

a visual reference for the segregation that still exists throughout the United States (U.S. Census Bureau 2010 Census). Counties where minorities represent 50% of the population or more are represented in dark blue and counties where Whites account for 90% or more of the population are represented in white. The fact is that for many students, college is often the first time these national patterns of racial segregation are broken down through diversity experiences with individuals from racial groups different than their own (Bowman & Brandenberger, 2012; Gurin et al., 2002).

Figure 1

Minority Population as Percentage of County Pop. (2010 Census Data)



Map Created by U.S. Census Bureau (2010). For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation.

What impact has this had on America's higher educational institutions? One of the most notable effects has been an increase in racial tensions and incidents on campuses nationwide. As the number of Black and other minority student populations grew, once invisible groups began to have a visual presence on what had been all White college campuses. With this visibility came increased reports of harassment, intimidation, and violence. By the late 1980s, these types of violence and intimidation were common enough to warrant their own classification as hate crimes (Levin, 2002). Hate crimes are generally defined as crimes that are motivated by the perpetrator's bias toward the victim and done with the intention of hurting and intimidating individuals because of their race, religion, national origin, gender, or sexual orientation (U.S. Department of Justice Community Relations Service, 2003).

Prior to the early 1990's, advocacy groups like the Anti-Defamation League (ADL) and the Southern Poverty Law Center (SPLC) provided most of the data on hate crimes (Levin, 2002). The passage of the 1990 Hate Crime Statistics Act changed the reporting process by mandating the FBI collect hate crime data as part of their Uniform Crime Reporting (UCR) program. The FBI was aided in this collection of data with the passing of the *Clery Act* in 1992 requiring universities to openly report crimes occurring on their campuses, specifically identifying those crimes that appear to be motivated by prejudice (Levin, 2002). Shortly thereafter, the FBI conducted a study that specifically looked at hate crimes on college campuses. Surveying 450 higher education institutions from 40 states, they found that 222 or 49% of these institutions reported at least one hate crime incident occurring on their campuses in 1998 (FBI Uniform Crime Report, n. d.). In 1996, colleges and schools accounted for 799 or approximately 9.1% of all hate crimes, where by 2008 these same institutions accounted for 907 or 11.7% of all hate crimes reported (FBI Uniform Crime Report, 2010). Since 1996, the FBI has listed schools

and college campuses as the third most common place for hate crimes to occur, with people's residences and public highways being the two most common respectively (FBI Uniform Crime Report, 2010). These numbers may not seem overly significant, but they are likely just the tip of the iceberg. Because hate crimes are often difficult to prove and because colleges are often reluctant to label incidents as hate crimes due to the negative press associated with them, it is likely that many hate crimes are misclassified, go unidentified, or are not reported by victims (Wessler & Moss, 2001). The SPLC predicts that the real number of hate crimes in the U.S. annually is 15 times higher than those currently reported by the FBI (Southern Poverty Law Center, 2005). Current FBI statistics show that less than 10,000 hate crimes occur per year.

Regardless of the exact numbers, a review of hate crimes on college campuses reveals a disturbing problem for universities and colleges. Recent examples of hate crimes occurring on college campuses include an individual who ignited a homemade pipe bomb with the letters KKK written on it in the dorm room of two Black students enrolled at a small college in Utah and an incident where three White students at a university in Maine left an anonymous racist and threatening voicemail message for a Black student that began with the statement "I wonder what you're gonna look like dead?" (Altschiller, 2005, p.135). In 2002, on the campus of Oklahoma State University, three fraternity members simulated a Ku Klux Klan lynching with one member dressed in a Klan robe pretending to hang another member wearing a prison uniform in Blackface while the third member stood over him dressed in overalls, bearing a confederate flag and a bullwhip (Case, 2005). Other incidents in the last decade include cotton balls found strewn about the floor outside of a Black cultural center at University of Missouri-Columbia, a swastika found scrawled on the bathroom wall near a Jewish studies center on the campus of the University of Miami, and death threats against Black students on a bathroom wall at Hocking

College in Ohio (Surge in Campus Hate Crimes, 2010). In 2010, two of the more notable incidents included a rope noose found hanging from a tree outside a Black cultural center on the campus of the University of Maryland and a student group at UC San Diego organizing a "Compton Cookout" to mock Black History Month to which guest were encouraged to dress in cheap urban clothing, sport chains, gold teeth, nappy hair and come prepared to eat watermelon, chicken, and drink malt liquor and cheap beer (Surge in Campus Hate Crimes, 2010).

These acts are often seen as more shocking by society because they typically view higher educational institutions as oases of tolerance and understanding. In short, college is not only the first time students have the opportunity to live, study, work, and engage with individuals that look different from themselves, it is also the first time many interact with individuals that exhibit social behaviors, lifestyles, values, and ideals that are substantially dissimilar to their own. This lack of knowledge and experience with the "other", fear of the unknown, students' desires for acceptance by their peer group, feelings of increased competition for limited resources and even perceived rivalries between groups or individuals can account for some of the aforementioned acts occurring on our college campuses.

Whatever the cause, these incidents have created numerous challenges for university administrators who are trying to maintain their image as bastions of tolerance and democratic principles. Although the challenges are numerous, the following section will highlight what research has identified as the most salient challenges for colleges and universities regarding the increasing diversity of their student bodies.

Challenges Created by a Diverse Student Body

Even though student bodies have diversified rapidly, U.S. education institutions curriculums, organizational policies and practices, administrative structures, and faculty have

been much slower to adjust to the increasingly diverse and complex needs of these new student bodies. For the first time in the history of the U.S. education system, colleges and universities were faced with the challenge of supporting populations of students of which they had little prior knowledge or experience. This lack of knowledge created numerous challenges for institutions of higher education. Although not comprehensive, some of the more prominent challenges for institutions of higher education include a professoriate unfamiliar in working with students from different racial and cultural backgrounds, a student population unprepared for the challenges associated with college, increased demands to diversify the curriculum, the self-segregation of racial groups, and the challenge of reducing existing racial tensions (Altbach, Lomotey, & Rivers, 2002).

Like much of the student population at most predominantly White institutions, the faculty has remained overwhelmingly White, male and middle class (Altbach et. al., 2002). As a result, many faculty members are at a disadvantage when it comes to engaging and having insight into the instructional needs of lower income and minority students. Beyond being unfamiliar with this new population of students, the professoriate has also resisted changes to what they see as the academic ethic (responsibility of higher education) and the historical traditions of colleges and universities (Altbach et. al., 2002). This stance has resulted in many faculty opposing structural and curricular changes designed to create more supportive environments for minority students (Altbach, et. al., 2002). The lack of minority faculty on college campuses has also negatively impacted the graduation and retention rates of minority students in comparison to those of White students (Allen, Epps, Guillory, Suh, Bonous-Hammarth, & Stassen, 2002).

Another challenge for higher education institutions has been that many minority students come to college from secondary school programs that are inferior to those attended by White

students. As a result, students from these school systems often enter college lacking the academic preparation necessary to be immediately competitive at the college level. This deficiency was not initially recognized by colleges and universities, resulting in higher than average attrition rates for most minority populations, especially in comparison to those of Whites (Altbach, et. al., 2002). The good news is that over the last two decades, attrition rates have improved for most minority groups. To achieve this increase, institutions of higher education have had to implement college-level remediation courses designed to help bring these students' performance to the college level and to create uniquely designed advising and support programs (Solmon, Solmon, & Schiff, 2002). The challenge has been that the remedial courses and support services implemented to assist these populations often require reassigning a proportion of an institution's increasingly limited resources, resulting in these courses and programs typically being the first to be cut during difficult budgetary times (Solmon, et. al., 2002).

As the overall number of minority groups on campus grew, they started to display a level of solidarity surrounding issues that directly impacted them on campus. One such issue has been their desire to see an integration of their cultural and ethnic perspectives into the traditional curriculum (Altbach, et. al., 2002). Even though much of the traditional curriculum has remained unchanged, organized student activism throughout the 60's, 70's, and 80's led to the establishment of various ethnic studies programs at colleges and universities across the United States (Altbach, et. al., 2002). Such programs include African American, Asian, Latino and Native American Studies Programs. Unfortunately, most of these programs have not been well funded and in most instances exist on the peripheral edges of these institutions, causing marginalized student groups to often feel even more marginalized. These programs also have not been well received by faculty, who are steadfast in their opposition to tampering with the

traditional curriculum, and administrators, who only see the increased costs associated with the creation of these new specializations and courses (Altbach, et. al., 2002). This debate gained momentum when former U.S. Secretary of Education William Bennett spoke out against what he called the "watering down" of the traditional liberal arts curriculum in the late 1990's and has remained on the national stage ever since (Altbach, et. al., 2002).

Universities and colleges are also facing the challenge of an increasing number of homogenous communities on campus. A growing number of students have formed smaller enclaves within the larger campus community based on commonalities such as race, gender, religion, and sexual orientation. Minorities as well as White students have historically sought out individuals with whom they feel safe, who they feel understand them, and around whom they can speak freely without being judged based on their beliefs or values (Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). This has been especially true for minority students who also struggle to find a cultural fit on campuses, who are more likely to have been on the receiving end of racist behaviors and who see few professors and staff from their racial group to whom they can turn to for advice and support. Desire for safe places where students can technically "be themselves" is understandable, however the segregation of the population into groups based on commonalities such as race can also increase the focus on and heighten tensions about these differences, which itself can lead to increased racial tension on campuses (Astin, 1993).

Lastly, institutions continue to deal with increasing racial tensions and incidents on their campuses. Some institutions have had marginal success implementing programs and policies designed at reducing racial tensions and racist behaviors, however, racially motivated acts and crimes continue to occur on campuses nationwide. The limited success of these programs and policies is largely because most are half-hearted attempts or temporary fixes by the

administration to what is an ongoing problem (Altbach, et. al., 2002). In addition, because of social media outlets such as Facebook and Twitter, when racial incidents do occur, the institution's image and reputation are brought into question and at times irreparably damaged before the university is even aware of the issue.

Taking into consideration the impact and challenges an increasingly racially diverse student body creates for institutions of higher education, one should not be surprised that individuals have raised doubts as to the benefits and necessity of racially diverse campuses. This has led to a two sided debate that has raged on for over three-decades. The following discussion will address the main facets of this debate and provide an overview of the research that supports and opposes the need for diverse student bodies.

Is a Racially Diverse Campus Beneficial?

Since the early 1980's a nationwide debate has ensued as to the benefits of a racially diverse campus (antonio, 2001b). Considering the increased racial tensions and challenges often associated with a racially diverse campus, it is not surprising that such a polarizing discussion has emerged. Diversity has also become intertwined with many age-old educational issues; for instance, discussions about freedom of speech in the classroom are now focused on incidents of racially motivated hate speech, issues surrounding faculty hiring and promotion now are discussed from the perspective of the racial composition of the university faculty, and discussions about student conduct now center on the increasing incidents of racism on campus (Altbach & Lomotey, 1991; Dalton, 1991; Hively, 1990). The infusion of diversity into all aspects of the university has led individuals engaged in the aforementioned debate to develop stances supporting or opposing diversity. These perspectives have changed little over the last

three decades. To assist readers in understanding both sides of this debate, proponents and opponents arguments concerning diversity will be reviewed in the following paragraphs.

Higher education leaders and other proponents of campus diversity have generally supported the increasing diversification of their campuses, firmly believing that a racially diverse student body is necessary for institutions of higher education to adequately prepare their students to be effective citizens in a multicultural and global society (e.g., Bolinger, 2001, Rudenstine, 1996; Young, 1995). Proponents believe that students who engage with peers from different racial and ethnic backgrounds develop more understanding and tolerant viewpoints and attitudes concerning diversity. They also believe that diversity positively impacts students in numerous ways including improving their retention rates, overall satisfaction with college, and critical thinking skills. Conversely, critics oppose the diversification of our institutions of higher learning pointing to increased racial tensions and self-segregation on college campuses as examples of how racial diversification has actually led to students entering society with increased levels of racial intolerance and ethnocentrism (D'Souza, 1991; Sowell, 1989). Opponents also tend to believe that increased interaction with other racial groups provides few if any positive social or educational outcomes.

Diversity in the curriculum has also been an area of contention. Individuals on both sides of the debate view the undergraduate curriculum as having tremendous potential to influence future society (Baez, 2000). Proponents, who envision a future society that values and respects cultural difference, see higher education as the vehicle by which to achieve that future. These individuals view the traditional curriculum as an obstacle to this goal because they feel it ignores the multicultural tapestry that makes up American society. As a result, throughout the 1980's and 1990's, proponents pushed for the transformation of the undergraduate curriculum to include

representation of women and minorities. On the other hand, opponents typically view the undergraduate curriculum as a tool through which to develop a common and shared cultural identity that unites American society around a set of generally shared goals (Baez, 2000). These individuals perceive changes or challenges to the traditional curriculum (i.e., changing the curriculum to reflect the perspectives of multiple groups) as a threat to the "American cultural tradition" (Baez, 2000, p.384). Although the debate over diversity in higher education still continues today, both sides have been somewhat successful in achieving their objectives. For instance, proponents have succeeded in diversifying campuses and in making the undergraduate curriculum more open to the perspectives of others via the creation of ethnic and gender studies programs, whereas opponents have been relatively successful in maintaining much of the traditional curriculum as it has always been taught.

The ongoing debate over the benefit of diversity in higher education has led to a mounting body of literature on the topic; however, this still is a relatively new area of educational research (Denson & Chang, 2009). Even though a significant portion of the literature supports the aforementioned beliefs of proponents, research does exist that raises questions as to the benefits of a diverse learning environment. The following section provides an overview of the relevant literature in support and opposition of a racially diverse student body.

Benefits of Diversity in Higher Education

Over the last two decades a number of studies have arisen that address the benefits of diversity in higher education. Three diversity types have been identified based on studies by Gurin (1999), Chang (1999) and Milem and Hakuta (2000). These diversity types are structural diversity, curricular/co-curricular diversity, and interactional diversity. *Structural diversity* refers to the numerical representation of students from different racial groups. *Curricular/Co-*

curricular Diversity refers to students' exposure to different races through the formal classroom or workshops that focus on cultural awareness or ethnic studies. *Interactional diversity* characterizes students' exchange of information, ideas or experiences with people from different racial groups. Milem, et al. (2000) found that exposure to diversity through multiple perspectives, as described above, contributed to augmented openness to diversity, higher levels of intellectual engagement, improved complex thinking, and increased motivation (antonio, 2001b).

From the structural diversity perspective, Bowen and Bok (1998) found that White and Black alumni reported benefiting from attending an institution with an increased enrollment of racially diverse students. Specifically, these alumni felt that diversity improved their ability to engage members of other races and led to more positive attitudes toward other races in general (Denson et al., 2009). Antonio (2001a) found that the presence of even one minority student in a predominately White undergraduate discussion group enhanced the complexity of thought for the entire group.

In a review of research existing on the impact of co-curricular diversity, Denson et al. (2009) identified numerous scholars who showed co-curricular diversity relating positively to such outcomes as racism and intergroup understanding (Chang, 2002), intergroup attitudes (Lopez, 1993), critical thinking skills (Pascarella, Palmer, Moye & Pierson, 2001), cognitive and affective development (Astin, 1993a), learning and democracy outcomes (Gurin, Dey, Hurtado, & Gurin, 2002), and civic, job-related and learning outcomes (Hurtado, 2001).

Other scholars have focused specifically on the impact cross-racial interaction (i.e., interactional diversity) has in developing cultural awareness and racial understanding in students. Astin (1993b) found that socializing with someone from a different racial group often led to

increased cultural awareness, a commitment to racial understanding, a higher level of academic development, and greater satisfaction with college (antonio, 2001a). In a multi-institutional study of interracial interaction, Chang (1996) found that increased structural diversity directly led to increased frequency of interracial interaction. He found that increased interracial interactions ranging from the discussion of racial issues in college to attending racial/cultural awareness workshops enhanced student retention rates, satisfaction with college, and individual's intellectual and social self-concept (Chang, 1996). Other researchers have shown interaction diversity to be positively associated with student learning and personal development (Hu & Kuh, 2003), critical thinking skills (Nelson Laird, 2005), and student satisfaction with their overall college experience (Chang, 2001).

Although the studies that support diversity in higher education tend to be more prevalent, not all studies on this subject report positive findings. Directly contradicting much of the research that supports a racially diverse student body, Umbach and Kuh (2006) found that students attending liberal arts colleges with largely homogenous student bodies tended to report having more experience with and a deeper understanding of diversity then did their counterparts attending larger and typically more racially diverse institutions. Rothman, Lipset, and Nevitte (2003) concluded that racial diversity provided few positive outcomes and even led to negative effects on students' attitudinal and educational outcomes (Denson et. al., 2009). They found that as the number of minorities increased student satisfaction decreased, the perceived quality of education declined, and reports of discrimination increased (Rothman et. al., 2003). Other academic scholars have also posed questions as to the real impact of interacting with diverse peers in college. D'Souza (1991) argued that a multicultural campus only leads to balkanization (self-segregation) and increased levels of racial intolerance, even ethnocentrism. In a study that

focused mostly on White students attending Ivy League institutions, he argued that interactions with diverse peer groups most often led to increased racial tensions and created inhospitable and disaffirming campus environments for all students. In research conducted under the auspices of the National Association of Scholars, Wood and Sherman (2001) attempted to discredit research findings that support the diversity rationale, while countering with the argument that diversity does not lead to a free exchange of ideas or positive diversity outcomes because the research supporting it is flawed (Pike & Kuh, 2006).

The rapid diversification of American society and increasing levels of racial heterogeneity in colleges and universities (NCES, 2007), coupled with the increasing demand corporations are placing on institutions of higher education to produce employees prepared to work in an increasingly diverse and global environment (Engberg, 2007), will likely make both arguments less relevant over time. Based on the growth in minority enrollment that has already occurred, combined with the aforementioned diversity projections, it is highly likely that educators and administrators will be more concerned with how to create institutions able to serve this new student body effectively and producing graduates capable of working in diverse environments than they will be about arguing if a diverse student body is beneficial or not.

To help illuminate my decision to focus this study on the impact interracial contact has on the racial perceptions of domestic undergraduate business students, the following section will highlight Corporate America's push to hire employees who possess the democratic skills necessary to work with and manage diverse populations while also discussing the role institutions of higher education have in preparing their students to enter an increasingly diverse society and workforce.

Workforce Diversity and the Role of Higher Education

Since the beginning of the last decade, it has been increasingly understood that for corporations to remain competitive in a global marketplace, they must learn to capitalize on the benefits associated with a diverse workforce (Cox & Blake, 1991; Salomon & Schork, 2003; Buttner, Lowe, & Billings-Harris, 2006). The importance corporations place on diversity is evident in the fact that today almost every U.S. Corporation has implemented some sort of diversity policy within its company (Salomon, et al., 2003). In a small random sampling of Fortune 500 companies, over 80 percent reported having a formal diversity program (Ogunjimi, 2010). Research has also provided evidence supporting this movement, showing that corporations able to employ an educated and diverse workforce enjoy a competitive advantage over less diverse competitors (Cox, 1993). For instance, 50 corporations identified by Fortune magazine as the best places for minorities to work had five-year stakeholder returns over 15% higher than the S&P 500 (Salomon, et al., 2003). Commonly identified drivers of diversity within corporations include access to a broader talent pool, improved innovation, stronger customer relations, improved productivity, increased speed and agility, and stakeholder demand (Salomon, et al., 2003). Cox, et al. (1991), identified six primary areas where diversity gives a corporation a competitive advantage: cost, resource acquisition, marketing, creativity, problem solving, and organizational flexibility. In short, the competitive advantage a diverse workforce brings to a company remains the principal reason corporations have begun to embrace diversity.

Many corporations deem the advantages of a diverse workforce to be significant enough that the desire to find qualified employees with the skills sets necessary to work effectively with individuals of other races has become increasingly urgent. In their push to find the diverse talent necessary to remain competitive, corporations have turned to universities who they are pressing to

step up the production of employees capable of leading a diverse and global workforce. For instance, sixty-five of America's leading businesses filed an amicus brief in support of the University of Michigan's affirmative action cases expressing their concern with being able to hire and maintain a diverse workforce. These corporations made the case that in order for them to hire and maintain a diverse workforce; they need individuals "who have been educated and trained in a diverse environment" (Gratz et al., v. Bollinger et al., 2003: Grutter et al., v. Bollinger et al., 2003b, p. 1). This push for employees qualified to face the challenges of a diverse workforce is supported by research that shows exposure to campus diversity teaches students to think critically, solve problems more quickly, and value diverse perspectives (Gurin, et al, 2002), all of which are skills that translate into greater efficiency within diverse work environments (Engberg, 2007).

Although a sizeable amount of research has been conducted on the learning and democratic benefits of diversity, little research until recently has been conducted linking a diverse student body to student's preparation for future employment. The role higher education plays in producing employees ready to enter an increasingly diverse workforce was elevated during the affirmative action lawsuits the University of Michigan faced in the late 90's early 00's. Gurin (1999), in a report used during the University of Michigan Supreme Court cases concerning the use of race in university admissions, provided empirical evidence as to the relevance diversity plays in improving student learning, in enhancing civic values, and in their preparation for future employment. This argument resonated with Supreme Court Justice Sandra Day O'Connor, who in writing the majority opinion for the 2003 *Grutter v. Bollinger* ruling stated, "Diversity promotes learning outcomes and better prepares students for an increasingly diverse workforce, for society, and for the legal profession. Major American businesses have made clear that the

skills needed in today's increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints" (*Grutter v. Bollinger*, 539 U.S. 306, 330 [2003]).

However, some questions still exist as to whether colleges and universities are capable of producing employees with the skills necessary to be competitive in today's marketplace. In a report issued by the RAND Institute, corporate leaders ranked cognitive and social skills, such as the ability to communicate, negotiate, and interact across difference, much higher than specific knowledge while emphasizing that these skills remain "in shortest supply among entry-level candidates" (Bikson & Law, 1994, p. 26). On the other hand, the Association of American Colleges and Universities (AAC&U) believes colleges and universities are uniquely positioned, "by their mission, values, and dedication to learning, to foster and nourish the habits of heart and mind that Americans need to make diversity work in daily life" (AAC&U, 1995, p. xvi). More recently, the AAC&U (2002) has even begun to advocate for a college level education that produces an "empowered, informed, and responsible" student capable of negotiating the inevitable differences of a diverse society (p. xi). The National Association of State Universities and Land-Grant Colleges (NASULGC) (1997) asserts that it is the duty of institutions of higher education to provide educational environments that promote increased civic responsibility and ethical behaviors amongst its students, thus helping develop citizens capable of negotiating a racially and globally diverse society (Mayhew & Engberg, 2010). Couple the pressure being placed on universities and colleges by corporations to produce employees qualified to effectively work in an increasingly diverse labor force with the research pointing to the improved learning and democratic outcomes students gain when exposed to diversity and it becomes clear that colleges and universities are not only capable of training and preparing their students to be

effective members of an increasingly diverse society and workforce, but they are likely the best setting in which such preparation and training should occur.

Whether they want this responsibility or not, institutions of higher education will need to respond to the diversification of their campuses, the future preparatory needs of their student bodies, and the pressures of their corporate partners. If colleges and universities truly embrace the ideology that one of their key missions is the development of democratic and civic-minded leaders for an increasingly heterogeneous society, then providing a campus environment for their students that can improve the racial tensions on their campuses will be of utmost importance. In the next section I will review the impact of a campus's climate on student development and retention and discuss the role interracial interaction can play in improving the climate of our colleges and universities.

Campus Climate and the Role of Interracial Interaction

To accomplish the monumental task of preparing students to be the democratic citizens society and corporations are demanding, educators must address the aforementioned challenges created by an increasing racially diverse student body; paying close attention to those challenges associated with the mounting racial tensions on their campuses. At the minimum, racial tensions on campus disrupt the teaching and learning process, but if left unchecked they can poison the entire climate of a campus (Hurtado et al., 1999). Everything from the attitudes, values, and expectations of the faculty, staff, and students to an institution's historical policies and social structures create a general atmosphere often referred to as an institution's campus climate (Peterson & Spencer, 1990). The less welcoming the campus climate is to various individuals or groups, the more likely these groups and individuals are to encounter harassment or feelings of isolation that can directly impact their academic and social integration.

Numerous studies have identified a negative campus climate being responsible for students feeling alienated, experiencing poor academic adjustment and performance, lacking institutional commitment, experiencing lower levels of social, personal and emotional adjustment, and less than positive experiences with university faculty and staff (see Cabrera & Nora, 1994; Hurtado, Carter, & Spuler, 1996; Nora & Cabrera, 1996; Smedley, Myers, and Harrell, 1993). Research has shown that a college's perceived racial climate tends to impact minority students at a higher rate than White students (see Astin, 1993b, Cabrera et al., 1994, Huffman, 1991, Loo & Rolison, 1986, and Tierney, 1987). However, Gilliard (1996) and Nora, et al., (1996) found that White student persistence rates were also negatively impacted by perceptions of a poor campus climate. Essentially, an institutional climate that exposes students to prejudice, or an environment which they perceive as discriminatory, impedes every student's cognitive (academic performance and adjustment) and non-cognitive (social, personal and emotional adjustment) development; which often leads to numerous outcomes negatively impacting a student's level of institutional commitment and retention. In light of the increasing diversification in our institutions of higher education and workforce, and the negative outcomes associated with a poor campus climate, college and university administrators will need to address how to lessen racial tensions on their campuses; creating a safe and welcoming learning environment for every student.

One often suggested solution for improving relations among groups that are experiencing conflict has been to increase exposure to and interaction between individuals from different backgrounds. This theory has been coined the "contact hypothesis", but is also known as Intergroup Contact Theory, and was developed over 60 years ago by psychologist Gordon Allport in his book the Nature of Prejudice (1954). Allport (1954) proposed that under

appropriate conditions (equal status, common goals, intergroup cooperation, and support of authority figure/law/custom) interpersonal contact between different groups would lead to reductions in prejudice and discrimination (Cowan, 2005). Essentially, if individuals have the opportunity to converse, work, socialize, and live with individuals different from themselves, they will gain a level of understanding and appreciation for those whom they view as different; as a result of this new understanding and appreciation, prejudice and discrimination should then diminish. Since the origination of this theory, a slew of researchers have conducted studies supporting Allport's theory that contact with peers from different racial and ethnic backgrounds increases the chance for interracial interaction, which can positively impact individuals' perceptions, beliefs, values, and behaviors regarding race and diversity (Chang, 2001). For instance, a recent meta-analysis by Pettigrew and Tropp (2006) of over 500 studies found that interracial contact in most instances reduced prejudice and intergroup bias.

Combine this information with the challenges and benefits associated with a diverse student body and it would make sense for educators to strongly consider how intergroup interaction can improve race relations on their campuses while enhancing the preparation of their students to enter an increasingly diverse society and workforce. To support educators who may encounter resistance to diversity initiatives and existing research on the benefits associated with diverse campuses and classrooms, I put forth the current study with the goal of assessing the influence interracial contact has on domestic undergraduate business students' perceptions of other racial groups. To do this, I will employ the contact hypothesis as a theoretical framework through which to examine the question, do students who have higher levels and quality of interracial contact exhibit more or less positive racial perceptions of other races? This theory will be analyzed in greater depth in the following section of this chapter.

PART II: Theoretical Framework

The United States, its institutions of higher learning and workforce are becoming progressively more diverse. To remain competitive in an ever-increasing diverse and global economy, society will need individuals capable of understanding and working with diverse groups of individuals who may not share the same physical features, ideologies, religious beliefs, language, or culture. The burden of developing such democratic citizens has largely fallen on the shoulders of our colleges and universities which society and corporations view as being best suited for preparing citizens capable of negotiating a racially and globally diverse society and workforce. Faced with these expectations, educators have begun to seek ways of developing students prepared to be democratic citizens of an increasingly diverse society and workforce. A half-century-old theory that has been shown to improve what Gurin, et al. (2002, p. 339) deemed student "democracy outcomes", is to increase the amount of contact and interaction between individuals from different backgrounds. Through increased contact and experiences with diverse peers, students showed improved racial understanding and cultural awareness (antonio2001b; Milem, Umbach, & Liang, 2004), ability to work with other races (Orfield & Whitla, 2001), and citizenship years after college (Duncan, Boisoly, Levy, Kremer, & Eccles, 2003). Psychologist Gordon Allport developed this theory, which is commonly known as the contact hypothesis or intergroup contact theory, in his 1954 work called the Nature of Prejudice. Allport hypothesized that interracial contact occurring under a set of four conditions (equal group status, shared or common goals, intergroup cooperation, and the support of authorities, laws, or customs) would lead to reductions in prejudice towards other racial groups.

Based on Allport's study and the findings of numerous studies conducted on his theory since, a number of educational institutions have begun to implement educational initiatives

designed to increase and encourage opportunities for positive interracial interactions (Engberg, 2004). These initiatives include multicultural courses, workshops, and training sessions designed to enhance students' awareness and understanding of different racial groups and their cultures (Banks, 2001; Humphreys, 2000) and have largely focused on interracial contact as a medium through which to explore differences, build cooperative communities, and gain exposure to different perspectives and worldviews (Engberg, 2004; Zuniga, Nagda, & Sevig, 2002). Although research has generally shown these initiatives to be successful (antonio, 1998; Astin, 1993a; Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Gurin, 1999; Vilalpando, 2002), much of this empirical work has focused on interracial interactions from only one of three distinct forms of racial diversity that include, *structural diversity* (racial composition of the student body), *curricular/co-curricular diversity* (course/workshop efforts to expose students to different races and cultures), and *interaction diversity* (face-to-face cross racial contact) (Denson et al., 2009). Few studies have attempted to look at how a student's amount of exposure to the multiple types of diversity, regardless of type, influences her or his perception of other racial groups.

Because students can engage with one another in multiple ways across the diversity spectrum, to only focus on how exposure to one type of diversity impacts their non-cognitive and cognitive development seemingly limits a researcher's ability to assess the true impact of interracial contact. Milem, et al. (2000) found that exposure to diversity through multiple perspectives contributed to openness to diversity, higher levels of intellectual engagement, enhanced critical thinking, and increased motivation (antonio, 2001b). In fact, Pettigrew (1998) was critical of the field for concentrating on the effects of contact in isolated situations rather than observing the cumulative effects of numerous contacts (Yeakley, 1998). This critique is

extremely relevant considering that it has been shown that attitude changes occurring from one point of contact typically lessens over time, whereas attitude changes occurring from multiple points of contact are more lasting (Yeakley, 1998). Thus, the current study endeavors to determine if students who have higher levels of interracial contact exhibit more or less positive racial perceptions of other races. In other words, do increased levels of cross-racial interaction reduce or increase students' prejudices towards other racial groups? Because of my interest in evaluating the impact that increased levels of interracial contact have on students' perceptions and prejudices, the following study is grounded in Allport's contact theory. In the proceeding section I provide a historical overview of this theory.

Historical Synopsis of Contact Theory

Many advances in civil rights and in creating a society more open to diversity and multiculturalism have been made over the past four decades, however the sad reality is that racism and prejudice have been institutionalized in our society and institutions of higher education (Pincus & Ehrlich, 1988). University administrators therefore must begin to address ways in which they can reduce racial tension and prejudice while improving the overall climate of their campuses. One of the seminal works regarding the reduction of racial tensions and prejudice has been social scientist Gordon Allport's study concerning the intergroup contact hypothesis (1954). The essence of the contact hypothesis is that racism and prejudice are a byproduct of ignorance and a lack of exposure to different racial groups. Simply stated, the more contact that occurs between individuals from different groups the more they learn from one another, which leads to a growth in liking and a reduction in prejudice. Initial research on intergroup contact theory often showed that interracial contact had either no effect or negative effects on racial perceptions and attitudes (Amir, 1976). Social scientists Watson (1947) and

Williams (1947) began to develop theories concerning interracial contact shortly after World War II (as cited in Pettigrew, 1998); however, Allport's hypothesis has proven to be the most influential of these theories because it was the first to specify a set of conditions necessary for interracial contact to successfully reduce prejudice (Pettigrew, 1998). First presented in *The Nature of Prejudice* (1954), Allport theorized that for interracial contact to result in positive outcomes, it needed to occur under a set of four conditions. First, groups need to be of equal status (i.e., one racial group cannot have less power or ranking than the other), second, the groups involved must have a shared or common goal, third, there must be intergroup cooperation (i.e. for the groups to attain their goals the groups must work interdependently), and lastly, contact must occur under the auspices of an authority figure, set of laws, or agreed upon customs (Pettigrew, 1998). Allport (1954) warned that contact by itself, without these conditions, would more often than not lead to an increase in prejudice.

Studies seeking to test the feasibility of Allport's modification to the intergroup contact theory quickly followed. After the desegregation of the Merchant Marine in 1948, a Brophy (1946) found that the more voyages White seamen took with Blacks, where most or all of the conditions noted above were present, the more positive their racial attitudes became (as cited in Pettigrew, 1998). Kephart (1957) discovered that White police officers in Philadelphia who had worked with Black officers under the aforementioned conditions tended to have fewer objections to having a Black partner, taking orders from higher ranking Black officers, and to other Black officers joining their districts (as cited in Pettigrew, 1998). Deutsch and Collins (1951) compared desegregated housing projects in New York City with segregated projects in Newark found a sharp difference in how White housewives viewed their Black neighbors (as cited in Pettigrew, 1998). White housewives living in desegregated complexes were shown to have a

higher level of esteem for their Black neighbors and generally favored interracial housing (75% approval) compared to their counterparts in Newark (25% approval).

In the five decades since Allport's defining work, intergroup contact theory has become a principal topic of study for many social psychologists. Although not all contact theory research has supported what has become known as Allport's contact hypothesis (see Brooks, 1975; Ford, 1973; Jackman & Crane, 1986; Welch & Sigelman, 2000), most studies report positive effects of interracial contact, even in situations lacking Allport's key conditions (Pettigrew, 1998). Allport's hypothesis has also been supported in studies involving a variety of settings, groups and societies, including research on interracial workers in South Africa (Borman & Mynhardt, 1991), American perceptions of Asian immigrants (Riordan, 1987), disabled persons (Anderson, 1995), the mentally ill (Desforges, et al., 1991), homosexuals (Herek & Capitanio, 1996) AIDS victims (Werth & Lord, 1992) and the elderly (Caspi, 1984) (as cited in Pettigrew, 1998). In 2006, Pettigrew and Tropp performed a meta-analysis on 525 contact theory studies that showed significant association between interracial contact and reductions in prejudice and improved racial attitudes. Their extensive findings indicated that interracial contact leads to a reduction in racist attitudes and perceptions, that the reduction in prejudice towards those individuals in the study often led to a generalized reduction in prejudice towards the entire population, that prejudice reduction occurred across a plethora of targets (gender, class level, disability, sexual orientation) and in a variety of settings and that reductions in racial bias even occurs when only a few of Allport's contact conditions are met. Focusing on the field of mental health, Smith, Constantine, Dunn, Dinehart, and Montoya (2006) performed two separate meta-analyses covering over 80 studies on the impact of multicultural training on mental health professionals' levels of prejudice and bias. In both meta-analyses, they found significant evidence that

participants who engaged in multicultural training displayed lowered levels of prejudice and racism.

In summary, a significant array of research on the contact hypothesis has been conducted across varied settings, groups, cultures, and societies. This research as a whole tends to support Allport's theory that contact occurring under most or all of his specified conditions leads to reductions in prejudice and improved perceptions of other groups. The theoretical foundations of Allport's theory, and the numerous studies on interracial contact that have followed, help in understanding how such forms of contact can lessen racial tensions and long held prejudices. Because of the rapidly changing demographics of higher education and the impact college and peers have on students' intellectual and personal development (Pascarella & Terenzini, 1991; Kuh, 1993), extensive research has also been conducted on this topic from the perspective of college students. To better understand how this theory impacts college students, specifically their racial perceptions and prejudices of others, the following section will look at interracial contact theory research from the collegiate perspective.

Interracial Contact and College Students

Racial tensions on college campuses are often invasive, impacting almost every aspect of the campus community, resulting in less than positive campus climates. Due to the importance campus climate plays in a students' academic (cognitive) and social (noncognitive) development, a substantial quantity of research has been conducted on the impact interracial interaction has on college students' racial biases and openness to diverse perspectives and cultures. The aforementioned research has focused on initiatives ranging from multicultural courses, diversity workshops and training sessions to intergroup dialogue, collaborative learning and community

service programs. The following paragraphs highlight some of the more notable studies performed on the subject of interracial interaction in relations to college-aged students.

In 2002, Chang conducted a study that set out to examine the impact diversity courses had on students' prejudicial attitudes. Using a cross-sectional design that examined 15 diversity courses, he found that students surveyed prior to taking the diversity course showed higher levels of prejudice than those surveyed after completing the course. Hurtado (2001) and Gurin, et al. (2002) also studied the effects diversity-based courses had on White, Asian, Latino, and Black student awareness, appreciations, and acceptance of different racial groups. Hurtado (2001) found significant correlations between enrollment in a diversity course and the three outcomes listed above, whereas Gurin, et al. (2002) noted positive influence on racial attitudes for White, Asian, and Latino students, but not for Blacks.

Participation in diversity workshops was also found to improve relationships between different racial groups. Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) and Whitt, Edison, Pascarella, Terenzini, and Nora (2001), in a national study of CIRP data, found that participation in diversity workshops during a student's first year led to increased openness to diversity for all students, but impacted White students' attitudes more positively than those of minority students. Vogelgesang (2001) noted significant improvements in openness to diversity for Asian, White, and Black students but insignificant effects for Latino/a student's.

Even programs whose intent is not explicitly directed at reducing racial tensions and prejudice, such as service-learning projects, have been shown to positively affect students' attitudes and perceptions. Etzioni (1983) felt this was likely due to these programs providing students from diverse racial backgrounds the opportunity to interact with and get to know one another on equal terms while working together to complete a common task or goal (as cited in

Engberg, 2004). Astin and Sax (1998) and Astin, Sax, and Avalos (1999) used CIRP data to assess the impact service learning has on students' openness to diversity. Astin and Sax found that four specific types of service learning (i.e., education, public safety, environmental, and humanitarian) significantly promoted racial understanding, enhanced their knowledge of different racial groups, and helped students relate to people from different races and cultures (1998). Astin et al., studied the long-term effects of participation in service projects and found that students engaged in service-learning were more likely than non-participants to encourage racial understanding and socialize with diverse groups 5 years later (1999).

Of the abundance of research that has been conducted on the educational interventions used in reducing racial bias and promoting racial understanding amongst students, a considerable number of these studies focus specifically on face-to-face interactions between students. The focus on face-to-face interactions is likely due to researchers understanding the role students play in one another's cognitive and non-cognitive development. Feldman and Newcomb (1969) argued that although numerous socializing agents' impact students, their peers are the primary vehicle for much of the socialization that transpires within colleges and universities. Chickering (1969, p. 253) concurred stating, "a student's most important teacher is another student". Alexander Astin (1993) found that a student's peer group in some way or another affected almost every aspect of a student's development.

Much of the research on face-to-face interaction focuses on analyzing the impact of educational interventions such as peer-facilitated training, living learning communities, intergroup dialogue, and collaborative learning. Nelson, Johnson, Boyd, and Scott (1994) conducted a study examining the effects of a short-term peer-facilitated diversity training session on White students (as cited in Denson, 2009). Nelson et al. (1994) found that students in the

experimental group were more hopeful about intergroup understanding, less likely to believe minority students were unqualified to be at their institution, and were more comfortable intermingling with minority students (as cited in Denson, 2009). Pike (2002) examined the impact living-learning communities (a residential option that incorporates educational opportunities and scholarship into students living arrangements) have on students' openness to diversity. The results of this study showed that participation in a living-learning community resulted in increased openness to diversity when compared with individuals living in a traditional residence hall setting (Pike, 2002). Another notable result of Pike's (2002) study was that both living-learning communities and traditional residence hall living were positive predictors of increased student openness to diversity compared to living off campus. Gurin, Peng, Lopez, and Nagda (1999) and Gurin, Nagda, and Lopez (2004) investigated the impact of intergroup dialogue initiatives (i.e., programs designed to promote conversations amongst racially diverse students about difference and intergroup relations) on students enrolled in a dialogue course at the University of Michigan. Both sets of researchers found that White and minority student participants exhibited less divisiveness between different racial groups, improved racial awareness, increased support for affirmative action and multicultural programming efforts, and enhanced awareness of causes of inequality (Gurin et al., 1999 and Gurin et al., 2004). Gurin et al. (1999) and Gurin et al. (2004) also investigated the long-term effects of intergroup dialogues and noted that participants still exhibited higher levels of racial awareness than non-participants 4 years later. Cabrera, Nora, Crissman, Terenzini, Bernal, and Pascarella (2002) focused on assessing the impact of collaborative learning initiatives (i.e., small-group instruction or tutoring sessions compared to traditional lecture format) on students' racial bias. Results of this study showed that students engaged in collaborative learning had a significant impact on their

openness to diversity and multiculturalism (Cabrera et al., 2002). Lastly, Hurtado, et al. (1999), Chang (1996), Astin (1993b), and Pascarella & Terenzini (1991) also performed studies that established increased cross-racial interaction led to positive attitudes and perceptions of students concerning race and a multitude of other multicultural issues.

It should be noted that not all studies have resulted in positive findings (see Nagda and Zuniga, 2003; Rothman, Lipset, & Nevitte, 2003; Neville & Furlong, 1994; Vogelgesang, 2001; Brehm, 1998; and Henderson-King & Kaleta, 2000). But as a whole, a significant portion of the research on the impact of interracial interaction clearly supports its ability to reduce prejudice and intergroup bias (Pettigrew, 1998).

Based on the results of the aforementioned research, it is likely that interracial interaction in the campus environment can occur in multiple contexts and vary in frequency and quality yet still result in positive democratic outcomes in students such as improved racial understanding and cultural awareness (antonio, 2001a; Milem, et al., 2004), ability to work well with members of other racial groups (Orfield and Whitla, 2001), and citizenship after college (Duncan, et al., 2003), as well as a wide range of other non-cognitive and cognitive abilities (antonio, 2001a). Because having a racially diverse campus is seen by many as a way in which to educated students about the realities of the increasingly diverse and global world in which they will eventually be living and working (Astone & Nunes-Wormack, 1990; Tierney, 1993), the following section will analyze research that has shown cross-racial interaction leading to improved racial perceptions within students.

Interracial Contact and Racial Perceptions

Understanding the impact interracial contact has on students' racial perceptions (i.e., student's attitudes regarding other racial groups or individuals) is the foundation for the research

question posed in this study, "Do students who have higher levels of interracial contact exhibit more or less positive racial perceptions of other races?" The following reviewed studies indicate that increased interracial contact tends to result in improved racial perceptions. For this reason, I will provide an in-depth review of these studies, using the results of their research to help in the analysis and discussion of the current study's findings in the following chapters.

Wishing to provide additional support for the benefits associated with racial diversity on college campuses, antonio (2001a) examined the effect of interracial interaction on students' leadership skills and cultural knowledge and understanding; specifically seeking to ascertain if differences existed between the effects of interracial contact on students who had close friends from different racial backgrounds versus individuals with racially homogeneous friendship groups whose interracial interactions were more casual in nature. antonio drew data for his study from a national longitudinal study performed by the Higher Education Research Institute between 1991-1996. Two freshman cohorts from 115 4-year institutions were given a pre-college survey in 1991 and 1992 conducted by the Cooperative Institutional Research Program (CIRP), which was followed by a second survey distributed to the same group in 1996. antonio used two key independent variables (reported frequency of interracial interaction and a student's self-reported feelings of racial exclusion) and a third primary independent variable (racial diversity of a student's close friends) to assess the impact these variables had on two dependent variables (a student's self-reported leadership ability and cultural knowledge and understanding).

Looking at the frequency of interracial interactions between students with many or few close friends, antonio found that students with higher levels of diversity amongst their close friends dined, studied, dated and roomed with students of a different racial background at two to five times higher frequency than their peers with a more homogenous friendship group.

However, almost one in four students with more heterogeneous friendship groups felt excluded from school activities because of their racial background versus students with same-race friends of whom only 1 in 10 felt excluded. Nevertheless, students with more racially diverse friendship groups reported greater gains in cultural knowledge and understanding in college.

Overall, antonio (2001a) found the effect of interracial interaction in regard to a student's leadership ability and cultural knowledge and understanding to be positive for all students regardless of the racial diversity of their close friends. Still, leadership ability was most enhanced among those students with same-race friendship groups who socialized and studied with students of a different race. On the other hand, white students with diverse friendship groups were significantly more likely to report gains in cultural knowledge and understanding compared to minority students, however, minorities with same-race friends also showed significant gains in cultural knowledge compared to White students.

Building upon the foundations of an earlier study by Milem and Umbach (2003), which looked at personality types, outcomes of diversity and school/community desegregation to determine the role these factors played in predicting students' likelihood of engaging in diverse activities once in college, Milem, Umback and Liang (2004) set out to further explore the effect of students' diversity experiences prior to and during college. Understanding that a student's experience with diversity prior to college is as important as her or his experiences in college, the researchers sought to understand the role a student's pre-college and college diversity experiences have in predicting their engagement in diversity related activities during their first two years of college (Milem, et al., 2004). Milem, et al., (2004) used data collected from a survey panel of students attending a public research university in the mid-Atlantic region. This data was part of a larger study exploring how colleges create diverse learning environments and

prepare students to live and work in an increasingly diverse and global democracy. Data were collected from 2,911 first-year students during their summer orientation program in 2000. In the spring of 2002, a follow-up survey was sent to the 2,911 of which 536 students responded. Due to the small number of minority students that responded to the survey, the researchers focused on White students.

The researchers identified four independent variables they found to influence students' experiences with diversity while in college. These included the students' pre-college environment (i.e., amount of racial diversity to which students had been exposed prior to college), their plans to engage in diversity related activities once in college, the extent to which students have been exposed to diverse ideas or information in their college classes, and the extent to which students believed that the university provided them opportunities to learn about different racial groups. These variables were analyzed to determine the impact they had on three primary dependent variables (i.e., the frequency student engages in cross-racial interactions while in college, student involvement in extracurricular diversity related activities while in college, and a student's engagement in diversity-related activities).

Assessing the impact the independent variables had on the identified dependent variables, Milem, et al., (2003) found on the whole students who were raised in more racially diverse environments and that had more interaction with diverse individuals prior to college were more likely to engage in interracial interaction and diversity related activities while in college. In regard to the frequency with which students engaged members of other racial groups, the study found that three independent variables (diverse interactions prior to college, classroom diversity, and perception of opportunities for diverse interactions) had positive effects on the frequency with which White students interacted with diverse peers once in college. In addition, student

involvement in extracurricular diversity related activities was positively impacted by students' pre-college diverse interactions, plans to engage in diversity-related activities once in college, and exposure to diversity in classes. Lastly, pre-college diversity of interactions, plans to engage in diversity-related activities, and experiences with classroom diversity all had positive effects on student involvement in diversity related activities while in college.

It is worth noting that all dependent variables were indirectly and directly affected by several factors that emerged as predictors of a student's experience with diversity prior to and once in college (Milem et al., 2004). A student's family income and gender were shown to be significant predictors of their experience with diversity prior to college. For instance, as family income increased, students were less likely to report they interacted across racial groups prior to college and were less likely to attend diverse high schools, live in racially diverse neighborhoods, and have racially diverse peers. Additionally, White women were more likely than men to report cross-interracial interaction prior to college. In comparison, students who had cross-racial interactions prior to college were more likely to report planned engagement in diversity related experiences in college; and similarly, White women were more likely than men to have these plans. Once in college, gender and student major where shown to be significant factors impacting students' likelihood to engage in diversity in their classes and perceptions of their opportunities for diverse interactions while in college. White women in particular were more likely to report that they engaged in diversity in their classes in college then men. Student major was also a significant predictor of exposure to diversity in the classroom. For instance, Milem et al. found that students with social majors (i.e., nursing, political science, spec. ed., and philosophy) indicated that they encountered diverse information or ideas in their classes more often than students whose majors were defined as realistic (i.e., electrical and mechanical

engineering and military sciences), investigative (i.e., biology, mathematics, sociology, economics, and civil engineering), and enterprising (i.e., business, journalism, communications, and computer science) (2004).

Orfield and Whitla (2001) analyzed the impact of diversity on law students' educational experiences. Their study reports on data collected from an exploratory survey of five law schools and a more thorough survey administered by the Gallup Poll to students enrolled at the University of Michigan Law School and Harvard Law School. Gallup and the research team, using extensive follow-ups, were able to achieve a combined response rate of 81% of law students from U of M and Harvard (1,820 students).

In measuring frequency of contact growing up and in high school, Orfield, et al. (2001) found that almost no Blacks or Latinos who succeeded in enrolling in these two elite law schools came from a highly segregated childhood and education, whereas almost half of Whites enrolled at these two institutions came from highly segregated backgrounds. Surprisingly, all racial groups were shown to have much less segregated college experiences. For instance, although more than forty-percent of students experienced very little interracial contact in high school, less than twenty-percent reported a similar pattern in college, with over fifty-percent reporting high levels of interracial contact. Overall, the researchers found that few if any students reported a total absence of interracial contact once in college, with 55 percent of Harvard students and 60 percent of University of Michigan students reporting high levels of interracial contact.

To assess how racial diversity impacted students' learning experiences enrolled at these two elite law schools, Orfield, et al. (2001) posed a set of fourteen questions. Participants were asked about the impact of racial diversity on their ability to think about problems and solutions in classes, their ability to work more effectively or get along better with members of other races, the

way topics are discussed informally at meals, over coffee, or at other similar occasions, the way topics have been discussed in the majority of their classes; and whether they consider having students of different races to be a positive or negative element of their educational experience. In addition, students were asked if conflicts because of racial differences reinforced stereotypes, challenged them to rethink their values, or ultimately became positive learning experiences. Participants were also asked about whether discussions they had with students from different racial backgrounds changed their view of the equity of the criminal justice system, their view of the issues that need to be considered in resolving serious conflicts over rights, their view of conditions in various social and economic situations, their view of the kind of legal or community issues that they will encounter as a professional, and their values regarding civil rights. Lastly, students were asked about the impact of one on one racial interaction versus interracial classes and what they thought should be done about the admissions policy at the law school they attended?

Orfield, et al. (2001, p. 30) argued, "One of the strongest possible impacts of experiences of diversity would be an actual change in beliefs and values growing out of the interaction". The results of their study largely support this argument, showing a substantial change in values amongst law students who reported powerful experiences from their interaction with students from diverse backgrounds in law school. For instance, when asked whether or not diversity had affected their ability to work more effectively and/or get along with members of other racial groups, over 67 percent of Harvard law students and over 71 percent of University of Michigan law students reported that racial diversity highly or moderately enhanced their ability to work with other racial groups. The results were also overwhelmingly positive when students were asked about their overall assessment as to whether diversity was a positive or negative element

of their educational experience. Eighty-nine percent of Harvard students and 91 percent of Michigan law students reported a moderate to high positive impact on their educational experiences. Even when asked about conflicts caused by racial differences, law students at both institutions reported positive results with over fifty-percent reporting that conflict significantly or moderately enhanced the likelihood of them rethinking their values while also leading to positive learning outcomes. However, one of the most notable value changes was in students' view of civil rights. Fifty-nine percent of Whites, 64% of Asians, 64% of Latinos, and 46% of Blacks reported that discussions with individuals from different racial background changed their values regarding civil rights (Orfield, et al., 2001).

Wishing to see if racial attitudes change when individuals from different races live together, Duncan, Boisjoly, Levy, Kremer, and Eccles (2003) examined how racial attitudes change when White students' were randomly assigned to live with someone from another racial group for their first year of college. Data were collected from 682 students enrolling in a large state university in the fall of 1998, 1999, and 2000, focusing exclusively on White students who were randomly assigned rooms and roommates as part of the university's lottery process. Although the researchers drew data from multiple courses including CIRP data, outcome measures were collected using a survey administered halfway through students' sophomore, junior or senior year depending on when they entered the university between 1998 and 2000.

Key outcome measures concerning students attitudes toward affirmative action were measured with the following statements: "affirmative action in college admission should be abolished," "affirmative action is justified if it ensures a diverse student body on college campuses," and "having a diverse student body is essential for high quality education" (Duncan, et al., 2003). To assess the impact of roommates on other social attitudes, participants were also

asked to evaluate the statement "wealthy people should pay more taxes" (Duncan, et al., 2003) To determine if roommate assignment affected behavior researchers also asked questions pertaining to personal contact with people from other racial groups, level of comfort with people from other racial groups, and how often respondent did volunteer work. Lastly, researchers also examined the extent respondents endorsed helping promote racial understanding.

Duncan, et al. (2003) found that endorsement of affirmative action was half to two-thirds of a standard deviation higher for Whites who were randomly assigned a Black roommate than among Whites not assigned a Black roommate. Their findings even pointed to evidence that higher numbers of Black floor mates (who were not roommates) was associated with more liberal attitudes toward affirmative action policies. The study produced some evidence that roommates with different racial backgrounds influenced Whites' level of contact and comfort levels with people from other racial groups, however, racial composition of roommates had small to no impact on Whites' redistributive attitudes (willingness to tax the rich). Overall, the study results showed that "students become more sympathetic to the social groups to which their roommates belong, with racial attitudes being most closely associated with roommate's race and income redistribution attitudes being closely associated with roommate's income" (Duncan, et al., 2003, p. 13).

Two recent studies sought to understand the influence diversity experiences in college have on student's pluralistic orientations (i.e., the ability of individuals to see different perspectives, work with diverse people, and overall tolerance of different beliefs) and preparation for a diverse U.S. workforce. Wanting to understand the long-term effects undergraduate diversity experiences have on cross-cultural workforce related outcomes, Jayakumar (2008) collected and examined longitudinal data on White students over a ten-year time span. CIRP

data was collected from surveys administered to entering White freshman at predominately white baccalaureate-granting institutions in1994, then in 1998 the same group was surveyed again, with the final survey being sent in 2004 after these students had entered the workforce. Jayakumar (2008) found that diversity and interracial interaction in college helps White students develop the cross-cultural workforce competencies and racial attitudes necessary to function in a diverse workforce. Most notably, the results of Jayakumar's study suggest that exposure to diversity and interracial interaction in college is more crucial to the development of pluralistic orientations and cross-cultural workforce competencies than precollege or post college diversity exposure (2008). Seeking to better understand the connection between a student's diversity experiences in college to a student's preparation for future employment, Engberg (2007) conducted a longitudinal study using data collected by the Preparing Students for a Diverse Democracy research project. Participants attended 1 of 10 public universities from across the U.S. that varied in size and racial makeup and that where known to have a strong commitment to diversity initiatives. Findings from Engberg' (2007) study generally revealed that college diversity experiences directly and indirectly impact students development of more pluralistic orientations. In addition, findings suggested that intergroup interactions were strongly related to students' with stronger pluralistic abilities and dispositions (Engberg, 2007).

Based on the strands of literature reviewed above, it seems that each form of diversity, from classroom diversity to informal cross-racial interaction, fosters improved racial perceptions among students. This study attempts to contribute to understanding the role interracial interaction has in shaping business student's perceptions of other racial groups by answering the question, "Do undergraduate business students who have more frequent and positive interracial interactions exhibit more or less positive racial perceptions of other races?" The current study is grounded in

the intergroup contact theory due to my interest in assessing how interracial contact (level and quality) impacts students' perceptions of individuals from different racial backgrounds. The essence of the contact hypothesis is that racism and prejudice are the result of a lack of knowledge of and exposure to different racial groups (Allport, 1954). The intergroup contact hypothesis suggests that the more contact that occurs between individuals from different racial groups the more these individuals can learn about one another, which in turn leads to a reduction of their negative beliefs and feelings towards other groups. I am focusing on undergraduate business students as the sample for the study due to the impact this population will have on the future U.S. workforce. Considering that business continually ranks as one of the top five college majors in the country and was recently listed as the number two most popular major by CollegeStats.org (Holtz, 2010), business students will make up a significant percentage of our country's future workforce. In short, business students are the next generation of workers who must adapt to the growing challenges associated with an increasingly diverse and global workforce. In addition, major American corporations have made it clear that the skills these future employees will need to compete in an increasingly diverse marketplace can only be developed through their exposure to widely diverse people, cultures, ideas, and viewpoints, which is the premise for intergroup contact theory (Grutter v. Bollinger, 539 U.S. 306, 330 [2003]). Chapter three will provide readers with a review of the methods used in the current study, data source, data collection process, population, and sample, variables being measured and the steps for data analysis.

CHAPTER THREE

METHODS

This chapter provides an overview of the methodological approach used to answer the question posed in the study. The method includes the research design, overview of the sample, data collection procedures, measurement scales utilized in data collection, and statistical processes implemented in analysis of data. This study assesses whether a relationship exists between the level (opportunity and quantity) and quality of interracial interaction a student has had and his or her perceptions of other racial groups. The researcher collected data from a population of 3,959 domestic undergraduate business students enrolled at a large public research university in the Midwest to answer the question: Do domestic undergraduate business students who have frequent and positive interracial interactions exhibit more or less positive racial perceptions of other racial groups? Within this question I also examined the significant differences that exist when taking a respondent's race, gender, parents educational level, hometown, or self-reported GPA into consideration. The researcher also assessed whether all variables, a combination of variables, or any one independent variable resulted in more or less positive racial perceptions amongst respondents.

Research Design

To help answer these questions the study uses a quantitative survey design. This specific research design was chosen for three reasons. First, this study is based on a clearly defined research question that seeks to determine if a relationship exists between students' level of interracial contact and their racial perceptions about other racial groups. Quantitative research generates numerical data that can be analyzed using inferential statistics to predict relationships between predetermined variables whereas qualitative data involves the use of words, pictures, or

objects to contextualize or provide a detailed description of a group of people or situation (Baumann & Bason, 2004). In short, quantitative research by nature is largely about measuring relationships between independent variables (the level of interracial contact) and dependent variables (students racial perceptions), which is the premise of this study. Second, the structured survey design allows me to measure students' attitudes about other racial groups. Structured surveys, or surveys that involve individuals responding to a set or series of questions through media sources such as mail or online, have been shown to be an excellent way to measure the knowledge, attitudes, feelings, beliefs, and behavior of different groups of people (Baumann, et al., 2004). Lastly, a quantitative survey design was selected because research suggests that quantitative survey designs are well suited for studies that involve multiple variables and large sample populations (O'Sullivan & Rassell, 1999). Such designs have also been shown to be useful in describing the characteristics of a large population (O'Sullivan, et al., 1999). Few other methods of observation can provide this general capability. As a result, very large samples are feasible, making the results statistically significant even when analyzing multiple variables, as is the case with this study.

The survey used to collect data was web-based and was created and conducted using Qualtrics Research Suite software. This delivery method was selected for various reasons, the most relevant being this sample's (18-22 year old undergraduate college students) comfort with technology, ease of access to the internet, and their familiarity in filling out surveys on-line via e-marketing and social media services such as Facebook and Email. Every student at the institution from which participants were selected is provided an Email account and free access to the Internet at numerous points throughout campus. This method was also selected because web based surveys have been shown to reduce the time required to implement the survey, improve data

collection times, increase the size of the population to which the survey can be distributed, and decrease operational issues and interviewer errors (Owens, 2002). Additionally, web-based surveys allow for other researchers to analyze the study's findings in multiple ways, which can enhance the findings of the study (O'Sullivan, et al., 1999). Finally, web-based surveys provide a low cost and environmentally advantageous alternative to paper surveys because they require no postage expenses or paper for envelopes and the printed survey (Owens, 2002).

Although there are numerous advantages to using a web-based survey, there are also limitations in using this approach. Web-based survey research is relatively new compared to paper survey research; hence there remains a great deal to be learned about the most effective and efficient ways to conduct a web-based survey. Some of the factors that have been identified as influencing the quality of data collected by web-based surveys include coverage bias and low response rates compared to face-to-face and mailed surveys (Solomon, 2001). Coverage bias occurs when the sample population does not have access to or chooses not to use the Internet (Solomon, 2001). Although there are great disparities in Internet access based on individual's racial and socioeconomic backgrounds, some populations have extremely high rates of access and use the Internet frequently; U.S. college students are one such population (Solomon, 2001). A meta-analysis of response rates in web-based surveys has also found that personalizing communications, pre-contacting the sample prior to emailing them the link to the survey, and performing follow-up contacts to the initial Email increase response rates (Cook, Heath, & Thompson, 2000). Each of these techniques was implemented in this study and is elaborated on under the procedures section of this chapter.

Sample

The sample from which data were collected consisted of 3,959 domestic undergraduate students who declared a College of Business related major or were enrolled in the business college of a large mid-western research university during the spring semester or 2012. The institution's College of Business has a secondary admissions requirement, thus freshman and sophomore students who have not completed the prerequisite courses and reached the 56 credits needed for admission to the college are considered declared business students. The entire domestic undergraduate business sample was surveyed in an attempt to maximize the generalizability of the study's results. The domestic undergraduate sample of the college at the time of the survey consisted of 2,075 (52.4%) freshman and sophomores and 1,884 (47.6%) junior and senior students. Of the 3,959 domestic undergraduate students, 1,530 (39%) were female and 2,429 (61%) were male. The racial breakdown of the 3,959 domestic undergrad business student sample was 83.2% White (3,296), 5.7% African American/Black (226), .3% Native American (5), 5.4% Asian American (214), 2.7% Latino (108), 1.7% Multiracial (69), and 1% unreported (41). Access to the names and email addresses of the sample from which data were collected was obtained with the help of the Assistant Dean for the College of Business.

Undergraduate business students were chosen for study for two primary reasons. First, as was stated by Supreme Court Justice Sandra Day O'Connor, who wrote for the majority in the 2003 *Grutter v. Bollinger* ruling:

> *Diversity promotes learning outcomes and better prepares students for an increasingly diverse workforce, for society, and for the legal profession. Major American businesses have made clear that the skills needed in today's increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints. (Grutter v. Bollinger, 539 U.S. 306, 330 [2003])*

Considering that business continually ranks as one of the top five college majors in the country and was recently listed as the number two most popular major by CollegeStats.org (Holtz, 2010), the sample was selected because undergraduate business students will comprise a significant percentage of our country's future workforce and citizenry. These business students are the next generation of workers who must adapt to the growing challenges associated with an increasingly diverse and global workforce. Therefore, understanding how interracial contact affects their perceptions of other racial groups will be of utmost importance to the universities responsible for developing employees for corporations who continue to stress the need for employees prepared to work with and lead an increasingly diverse and global workforce. Secondly, as an employee of an academic support program within the College of Business where this study was conducted, one of my responsibilities is to work closely with corporate recruiters to place undergraduate business students for internships, co-ops, and full-time employment. Corporate recruiters regularly share with our program the skill sets they are looking for in prospective employees, one of which is the desire to secure employees capable of working with and managing diverse individuals and teams. Thus, the College of Business domestic undergraduate student population presents the unique opportunity for the findings of this study to be used to inform our corporate recruiting partners and college administrators as to the programming and initiatives that currently are or could help develop students with more positive racial perceptions.

Survey

Data in this study were collected using an on-line survey designed with Qualtrics Research Suite software, and the survey consisted of both modified questions from surveys used by other researchers who have conducted research on interracial interaction and questions designed specifically by the researcher for the study (see Forman & Ebert, 2004; Chang, 2001; Chang, et

al., 2006); and the Monitoring the Future Survey in Bachman, O'Malley, Johnston, Rodgers, Schulenburg, Lim, & Wadsworth, 1996). Measures include students' perceptions toward other racial groups (dependent variable), the opportunity for contact, frequency of contact, and quality of contact (independent variables), and various demographic questions designed to collect information ranging from students' class level and gender to their hometown and parents education level. Variables are discussed in greater detail in the measures section of this chapter.

The survey is comprised of three sections. The first section contains questions designed to measure students' perceptions regarding other racial groups, section two has three parts designed to measure the level and quality of interracial contact a student has had, and section three consists of demographic questions. The sections of the survey were ordered this way for two reasons. The first was to minimize the survey's transparency or the ability for respondents to tell what the instrument was trying to measure. If a survey designed to measure attitudes or behaviors is overly transparent, this can make participants believe they know what attitudes/behaviors the research is looking for and thus they respond to questions as they believe the research would deem positive or socially desirable (Fishman, et al., 2003). This behavior is called social desirability bias and occurs when respondents try to present themselves in the best possible light (Fishman, et al., 2003). When dealing with sensitive topics such as race and racism, respondents are often unable or unwilling to respond accurately regarding their true feelings/attitudes (Fisher, 1993). Therefore, questions that were very direct about measuring respondents' level of interaction with other racial groups were placed after those questions designed to measure participants' perceptions about race. Second, the demographic section was placed at the end of the survey because research has shown that asking questions about race, residency, grades, or ones socioeconomic background can be seen as inappropriate or threatening by participants

before a level of trust is even established in the survey process (Pew Research Center, 2012). Thus, to increase the likelihood that respondents finished the survey, demographic questions were positioned at the end.

Survey questions were a combination of questions specifically designed by the researcher for this study and modified questions from existing surveys. Modified survey questions were taken from studies by Forman and Ebert (2004), Chang (2001), Chang et al., (2006), and Bachman, O'Malley, Johnston, Rodgers, Schulenburg, Lim, & Wadsworth (1996). Modified questions include questions 1, 4, 11, 12, and 14 in section one of the survey, questions 1, 2, 5, 13, and 21 in section two of the survey, and question one in section three of the survey (refer to Appendix F for a detailed breakdown and exact wording of each question).

The survey contained 43 questions: 14 close-ended declarative statements designed to collect data concerning the dependent variable (students' perceptions of other racial groups), 21 questions concerning the independent variables (level of interracial contact), and 8 demographic questions. Demographic questions were dichotomous in nature, asking respondents to respond by selecting yes or no to questions or by choosing an option from a set of multiple-choice answers. Data for questions regarding the level of interracial contact (independent variable) and student perceptions of other racial groups (dependent variable) were collected using Likert-type scales that allow subjects to indicate a level of agreement or disagreement with various statements or to express attitudes or preferences to various questions. For detailed information about the formatting of the survey please refer to the measures section of this chapter or Appendix F.

Although the present survey consisted of 11 previously tested questions, the current study also included questions specifically designed by the researcher for the current study. Thus, it was necessary to establish the validity and reliability of the overall survey. The validity of an

instrument is the degree to which it measures what it is designed to measure (Aiken, 1985) and the reliability of an instrument is the extent to which results of an instrument are consistent across repeated measurements of the same individuals (Creswell, 2003). There are numerous types of validity, however the most common include internal validity (extent to which a measure accurately shows if there is a relationship between two variables), construct validity (extent to which a measure used in a study fits the concepts being studied), and external validity (extent to which the findings of the study can be generalized) (Creswell, 2003). Reliability consists of internal and external reliability. Internal reliability is the extent to which a measure is consistent within itself and external reliability is the extent to which a measure varies from one use to another. To address possible reliability and validity issues with the measures used in this study, I engaged in various processes and procedures that have been identified as being useful in improving and assessing the validity and reliability of a survey.

To deal with construct validity issues, I first sought the assistance of experts in diversity research and survey design in creating the survey. These individuals provided critical feedback as to the structure, formatting of questions, and over-all readability of the measure. In addition, I acquired the assistance of two business graduate assistants and an academic advisor in the College of Business who provided feedback about the structure and wording of the survey and questions. The graduate assistants and advisor were each provided a hard copy of the survey with space for feedback and comments under each of the 43 questions. Based on the feedback of the consulted experts, graduate assistants, and academic advisor, survey questions 8, 15, 16, 19, 20, 21, 22, 25, 28, and 34 were reworded for ease of reading and clarification purposes. Questions 2, 3, 5, 8, 10, and 13 were reworded from positive leaning to negative leaning in their scoring. In addition, response choices for questions 26-34 were adjusted changing the response

option “every day” to “daily”. One question, “How often do you play sports with people of other races?”, was removed as it was found to be repetitive of question 25 which inquired about respondents engagement in intramural sports.

Next, a pilot-test of the survey was conducted to help further address the reliability of the instrument. Eleven students responded to the pilot-test and were members of the sample that was surveyed for this study. This sampling consisted of six females and five males, three Caucasians, three Blacks, two Hispanics, two Asians, and one multiracial student. Of those completing the pilot-test one was a freshman, three were sophomores, five identified themselves as juniors, and two were seniors. The pilot-test was created using Qualtrics Research Design software and was administered to the aforementioned participants online. Each participant received an Email in early March explaining that I was seeking his or her assistance in pilot-testing a survey I designed to use for my dissertation. The selected sample was given instructions about providing feedback and informed that if they chose to participate they would be entered into a drawing for a $10 iTunes gift card. To participate, respondents were asked to click on a link at the bottom of the Email that took them to the informed consent page where they then had a choice to not participate in the pilot-test or to participate by clicking on the arrow at the bottom of the page. Space was provided after each question for students to inquire as to the meaning of questions or provide feedback on the overall wording, language and structure used throughout the survey. Based on these individuals’ responses, only question 32 elicited consistent feedback from three respondents. Each felt the response choices offered did not provide them an adequate selection based on their dating experiences. This question was considered for removal, however after discussing the feedback with an expert in the area of diversity research, it was decided to keep this question in the final survey.

To improve external validity, follow-up procedures were implemented to increase response rates, which is essential to obtaining a sufficient sample size necessary to determine if a relationship existed among the variables of the study. The exact follow-up steps taken in the study are discussed in greater detail in the procedures section of this chapter. Control variables, such as respondents' class level, residency status, gender, race, hometown description, parents' education level, and self-reported GPA were also used to help improve external validity. Such demographic questions have been shown to be fairly standard for most surveys and can help researchers make sure they do not generalize the findings of the research beyond the groups in the study (Cresswell, 2003).

Next, the reliability of the instrument was examined using internal consistency reliability and the split-half method using the sample data (N=910). Internal-consistency reliability determines the degree to which individual items of an instrument measure a common concept (Creswell, 2003). Because the instrument consisted of one construct designed to measure the dependent variable (student's racial perceptions/Q1-Q14) and three constructs to measure the independent variable (Opportunity for Contact/Q15-Q25, Frequency of Contact/Q26-Q34, and Quality of Contact/Q35), each was tested separately. Quality of Contact was not included in the reliability analysis as it used only one question (Q35) to measure the quality of participant's interracial interactions. As a commonly used measure of internal-consistency reliability (Duke & Mallette, 2004), Cronbach's coefficient alphas (α) were calculated for each construct. Then each item, within each construct, was evaluated to determine if its deletion would increase alpha. Any item, that when deleted would significantly increase alpha was deleted and coefficient alphas were re-run. Only question 3 (A person's ability to learn is closely related to their race) in the dependant variable construct was found to significantly increase the coefficient alpha. Thus,

this question was deleted and new alphas were generated. These final results can be found in Table 1. Cronbach's alphas for each construct were found to be greater than .70.

Table 1

Cronbach's Alpha for Each Construct of the Instrument

(N=910)	α
Students Racial Perceptions (n=13) (Q3 Removed)	.846
Opportunity for Contact (n=11)	.901
Frequency of Contact (n=9)	.785

Note: N = sample; n = number of questions comprising each construct; Q = question; and α = Cronbach's Alpha

To further test the internal consistency of the instrument, each construct was also subjected to the Split-Half Method. This involved splitting each construct into halves, which were scored separately, and then the score of one half of the variable was compared to the score of the remaining half to test the reliability. Coefficient alphas (α) for each half of the test, correlation between forms, and Spearman-Brown Coefficients were calculated for each construct. These results can be found in Table 2. Coefficient alphas were all greater than .60

Table 2

Reliability Statistics for Split-Half Test of Each Construct of the Instrument

(N=910)	α Part 1	α Part 2	Correlation Between	Spearman-Brown Coefficient
	(n=7)	(n=6)		
Students Racial Perceptions	.746	.717	.739	.850
	(n=6)	(n=5)		
Opportunity for Contact	.829	.844	.756	.862
	(n=5)	(n=4)		
Frequency of Contact	.670	.607	.658	.796

Note: N = sample; n = number of questions comprising each part of the split-half test; and α = Cronbach's Alpha

and Spearman-Brown Coefficients for each construct were greater than .75. Considering that a

modest reliability of .50 or .60 is generally acceptable in the early stages of research, a reliability of .70 is seen as respectable, and .80 or higher is optimal for instruments that will be widely implemented (DeVellis, 1991; Henk & McKenna, 2004), it would seem that these results affirm the reliability of the instrument. Inter-Item Correlation Matrix and Scale Statistics for each internal consistency reliability tests were also run for each construct. The results of these matrix and statistics can be found in Appendix G.

Procedure and Respondents

A 10-minute web-based survey was used to collect data from undergraduate business students enrolled at a large mid-western university. Because several studies have found that response rates for web-based or internet surveys tend to be lower than those for mailed surveys (Medin, Roy & Ann, 1999; Couper, Blair & Triplett, 1999), steps were taken to implement various procedures in the data collection process that have been shown to improve response rates for web-based surveys. These procedures included personalizing all communication between the researcher and participants, pre-contacting participants prior to sending them the survey, offering monetary incentives to participants, and follow-up contact with non-respondents (Cook et al., 2000). The following paragraphs in this section further elaborate the specific procedures used to conduct the current study.

As was discussed previously, all students enrolled at the institution from which the sample being studied was selected are provided email accounts and multiple free Internet access points throughout campus. Using web survey software (Qualtrics Research Suite), participants identified with the aid of the Assistant Dean of the Multicultural Business Programs were sent a personalized prenotification email in late March informing them of the forth-coming survey and its intent (Appendix A). The personalized pre-notification email included information about the

study, advised that participants would be contacted within a week's time, and promised that upon completion of the forth-coming survey participants would be entered to win one of 10 $10 iTunes gift certificates (see Appendix A for exact wording and formatting). The survey was conducted at this point of the spring semester to allow for fist year undergraduate students to have as close as possible to a full academic year of college experiences before being surveyed. If this study had been conducted in the fall or early spring, first year respondents would likely have had limited opportunities to engage in many of the activities measured in this study; skewing the study's results.

One week after the pre-notification Email was sent, a personalized email with a link to the on-line survey was sent to students requesting their participation in the study (Appendix B). This email included a brief overview of the survey's intent, discussed possible risks associated with the study, reminded students about the incentive, reviewed the precautions taken to secure participants privacy, as well as contact information should they wish to contact the researcher or his advisor with questions or concerns (see Appendix B for exact wording and formatting). The final paragraph of this Email notified participants that by clicking on the link at the bottom of the email, they would be taken to the informed consent form (Appendix C). In addition, this email notified students that if they were under 18 years of age, they could not participate in this study without their parent's permission.

The informed consent form (see Appendix C for exact wording and formatting) provided students with a detailed overview of the study they were being asked to participate in, an estimate of how long the study would take, explained that the study was voluntary and that they could withdraw without penalty at any time, and outlined what steps would be taken to protect their confidentiality. Students were again reminded about the incentive if they chose to

participate and given the name of the researcher and how to get in touch with him or his advisor if the participant had any concerns or questions. The final paragraph of the consent form then instructed participants to click the arrow button (>>) at the bottom of the page if they wished to proceed to the survey or to exit the survey by closing the page if they did not wish to take the survey. If students clicked on the arrow button (>>) at the bottom of the informed consent form, they were taken directly to the first page of the on-line survey.

Completion rates of participants were monitored on a daily basis and follow up reminder emails (Appendix D) were sent to non-respondents once a week for three weeks, with the last reminder being sent to non-respondents the second to last week of April. After assessing the makeup of the pool of respondents, a final reminder email (Appendix E) was sent just to minority/multiracial students to increase the number of respondents within this demographic. The survey link was deactivated and the survey officially closed one week after the final reminder was sent to minority/multiracial students. Upon closing the survey, the researcher downloaded all responses into SPSS for cleanup and analysis. All students who submitted a completed survey were entered into a drawing for one of 10 $10 iTune gift cards. Winners were notified via email with a link to their gift certificate.

Of the 3,959 students sent a pre-notification email, email request with a link to the survey, and/or follow up email reminders, 28.8% (1142/3959) responded. Three individuals from this pool identified themselves as international students and thus were excluded from further analysis as the focus of this study was on domestic students. Respondents where then screened for incomplete surveys (surveys where one or more questions in section one or section two of the survey were left unanswered), which resulted in an additional 229 respondents being excluded from analysis and a final response rate of 22.9% (910/3959).

The 910 surveys used in the data analysis consisted of 680 (75%) White students, 90 (9.8%) Black/African American students, 67 (7.3%) Asian students, 46 (5%) multiracial students, 25 (2.7%) Hispanic/Latino students, and 2 (.2%) American Indian/Alaskan Native/Native Hawaiian. Four hundred and ninety six (54.5%) were female and 414 (45.5%) were male. Of the 910 surveys used, 199 (21.9%) were freshman, 208 (22.8%) were sophomores, 212 (23.3%) were juniors, and 291 (32%) were seniors. Demographically, 22.9% (209) respondents identified their hometowns as being rural, 67.6% (615) as being suburban, and 9.5% (86) as coming from an urban environment. Lastly, of the 910 respondents 193 (21.2%) identified themselves as Accounting majors, 181 (19.9%) identified as Supply Chain Management majors, 155 (17%) identified as Marketing majors, 152 (16.7%) identified themselves as majoring in Finance, 137 (15.1%) majored in Hospitality Business, and 57 (6.3%) and 35 (3.8%) identified themselves as General Management and Human Resource Management majors respectively. College of Business demographic statistics were consulted to determine if the sample was representative of students in the business college. Chi-square goodness of fit tests was run comparing the race, gender, and class level of the sample to the population. Based on these three indices, results revealed that the sample was statistically different from the population (race = 46.87 > 3.84; gender = 97.14> 3.84; class level = 21.49> 3.84). However, based on the computed effect sizes for the three indices (race = 0.05; gender = 0.11; class level = 0.02), results indicate that the proportion of the sample only differed slightly from the proportion of the population in terms of race, gender, and class level. In other words, although the sample did have slightly more females, minorities, and upperclassmen, there was very little practical difference between the sample and the population.

Measures

Identified variables include the dependent variable (students' perceptions towards other racial groups), the independent variables (opportunity for contact, frequency of contact, and quality of contact) designed to assess the level of interracial interactions students' have with their peers, and various demographic questions designed to collect information ranging from students' class level and gender to their socio-economic background and hometown description. Question 37, "Are you an international student", was not included in the analysis as it was only asked to make sure only domestic undergraduate business students were retained for the study. Table 3 provides a brief overview of each scale used in the study.

Table 3

Summary of the Scales Used in the Study

Scale	*Number of Items*	*Description*
Dependent Variable	14	Students Racial Perceptions
Independent Variable	21	Level of Contact (Opportunity for Contact, Frequency of Contact, and Quality of Contact
Demographic Variable	8	Respondents race, residency status, gender, hometown, parent's education, class level, undergraduate major, and self-reported grade point average

Dependent Variables

The dependent variable analyzed in this study focuses on participants' racial perceptions. The on-line survey included 14 items that represent the dependent variable (see Table 4 for a brief listing of each). These items consist of various statements pertaining to race and the importance of diversity, for example "Initiatives designed to create racial equality in education and workforce

settings are no longer needed" and "A racially diverse work environment does not provide a corporation any benefit" (for the exact formatting of these statements please see Appendix F). Respondents were asked to select a response from a four point Likert-type scale, where *1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, and 5=Strongly Agree*, that best represents their level of agreement or disagreement with the statement. Questions 1, 4, 6, 7, 9, 11, 12, and 14 were positively worded questions. Questions 2, 3, 5, 8, 10, and 13 were negatively worded questions and thus were reverse scored in the final analysis so that a score of 1 was equal to a score of 5 and a score of 5 was equal to a score of 1. Thus, students exhibiting higher values represent individuals with more positive racial perceptions and students with lower values represent individuals with less positive racial perceptions.

Table 4

Listing of the 14 Dependent Variables

• My experiences with people from racial backgrounds different than myself have been an important part of my personal growth and development.
• Initiatives designed to create racial equality in education and workforce settings are no longer needed.
• A person's ability to learn is closely related to their race.
• I am comfortable interacting with individuals from racial groups different than my own.
• Racism no longer exists in modern society.
• It is important to interact with people from racial groups different than my own.
• A racially diverse campus is beneficial for all students.
• Stereotypes are generalizations that accurately describe different racial groups.
• A racially diverse workforce is crucial for America to remain competitive in a global economy.
• I believe people should only marry individuals from their own racial group.
• I seek out opportunities to meet and learn about individuals different from myself.
• It is my responsibility to challenge racism when I see it.
• A racially diverse work environment does not provide a corporation any benefit.
• I appreciate and respect the values, ideals and beliefs of individuals from racial groups different than my own.

Independent Variables

Participants' level of interracial contact serves as the independent variable for this study. Interracial contact was measured using three indicators: opportunity for contact, frequency of contact, and quality of contact. Opportunity for contact was measured using a scale consisting of 11 items, frequency of contact was measured using a scale of 9 items, and quality of contact was measured using a scale consisting of one item (see Table 5 for an overview of each of these scales). Response options varied for each scale. When responding to questions about the opportunity for contact respondents answered: *(1) "all my race", (2) "almost all my race", (3) "about half my race", (4) "almost all other race(s)", and (5) "all other race(s)"* resulting in higher scores representing increased opportunity for interracial contact. Respondents answering questions about the frequency of contact they have had with other racial groups chose from the following responses: *(1) "never", (2) "once or twice a year", (3) "once or twice a semester", (4) "every week", and (5) "daily"*, with higher scores representing greater frequency of interracial contact. Participants responding to the quality of the contact they had had selected one of the following responses: *(1) "very negative", (2) "negative", (3) "neither negative no positive", (4) "positive", and (5) "very positive"*, with higher scores corresponding to an overall positive feeling about their interracial contact experiences.

Table 5

Scales used to Measure Participants' Level and Quality of Interracial Contact

OPPORTUNITY FOR CONTACT
• What is the racial makeup of the high school from which you graduated?
• What is the racial makeup of the neighborhood in which you grew up?
• What is the racial makeup of your family?
• Which do you feel best describes the makeup of the university/college you attend?
• How would you describe your closest group of friends growing up?
• How would you describe your closest group of friends in college?
• Which best describes the students in most of the college classes you have taken?

Table 5 (cont'd)

- How would you describe the makeup of the professional business organizations in which you are most active?
- Which best describes the faculty and staff at the university/college you attend?
- Which best describes the roommate(s) you have had since coming to college?
- How would you describe the makeup of the social activities in which you most often participate?

FREQUENCY OF CONTACT

- How often do you receive tutoring from someone of a race different than your own?
- How often do you have serious conversations with students of a different race?
- How often have you lived with someone from a different racial group?
- How often do you work with someone of another race?
- How often do you eat meals with individuals from a different racial group?
- How often are you taught by faculty from a different racial group?
- How often do you date someone from a different racial group?
- How often do you study with someone from a different racial group?
- How often do you use the services provided by the Multicultural Business Programs in the Eli Broad College of Business?

QUALITY OF CONTACT

- Overall, how would you describe your feelings about the experiences you have had with people from different racial backgrounds?

Demographic Variables

To minimize the unintended influences of other variables, several control variables were included in the analysis. These eight demographic measures include questions regarding participant's race, residency status, gender, hometown, parental education status, current class level, specific department within business major, and self-repotted college grade point average (see Table 6 for an overview of each of these measures). Race was measured using the following item: "How do you describe yourself?" Response categories for this measure include *1=Black/African American, 2=American Indian/Alaskan Native/Native Hawaiian, 3=Asian, 4=Hispanic/Latino, 5=White, and 6=Multiracial*. A participant's residency is measured using a code of "1" if International and "2" if Domestic. Although the initial database intentionally excluded International students, this question was presented to participants to help ensure only

domestic student data were used in analysis of the survey data. A participant's gender was measured using a code of "*1" if Male, "2" if Female, and "3" if Transgender*. A description of a participant's hometown was measured using the following scale: *1=Rural, 2=Suburban and 3=Urban*. A participant's parental education level was based on the level of education obtained by his or her most highly educated parent and was measured using the following scale: *1=some high school, 2=completed high school, 3=some college, 4=completed college, 5=graduate/ professional school beyond college*. Class level was measured using the scale: *1=Freshman,*

Table 6

Scales used to Measure Participants' Demographic Variables

• How do you describe yourself?
• Are you an international student?
• What is your gender?
• Which of the following best describes your hometown?
• Which of the following best describes the education obtained by your most highly educated parent?
• Which of the following best describe your current class level?
• What is your current undergraduate major?
• What is your current college cumulative grade point average?

2=Sophomore, 3=Junior, and 4=Senior. A students major was measured using the following scale: *1= Accounting, 2 = Finance, 3 = Marketing, 4 = Supply Chain Management, 5 = Human Resource Management, 6 = General Management, 7 = Hospitality Business, and 8 = Non-Business Major/Other*. This question was posed to participants to help ensure only data from business students were analyzed. Lastly, grades were measured using participant's self-reported grade point average in college.

Data Analysis

The findings from the analysis of the survey data are presented in detail in Chapter 4. Data gathered from the survey were entered in and analyzed using the Statistical Package for the

Social Sciences (SPSS) computer program. The following paragraphs provide a brief overview of the data analysis procedures that were conducted.

As was outlined above in the measures section, there are numerous factors (opportunity for contact, frequency of contact, quality of contact, and various demographic characteristics) that are believed to influence a student's perceptions of other racial groups. The question is to what extent these factors effect a student's racial perceptions of other racial groups? In order to determine the significance of the relationship existing between the predictor variables (opportunity for contact, frequency of contact, quality of contact, and demographics) and the criterion variable (students' racial perceptions), T-tests and Analysis of Variance (ANOVA) were conducted. Simultaneously, correlation coefficients were performed to assess the strength of the linear relationship between the criterion variable and the predictor variables.

In Chapter 4, I will provide a thorough review of the statistical procedures mentioned above, but more specifically the results of each technique performed on the data are explored in detail.

CHAPTER 4

RESULTS

The current study sought to investigate the relationship between students' racial perceptions (SRP) and the level of contact they have had with other racial groups. Specifically, do undergraduate business students who have higher levels of interracial contact exhibit more or less positive racial perceptions of other races? Level of contact was represented by three predictor variables, which have been labeled as opportunity for contact, frequency of contact, and quality of contact.

In the following paragraphs, the statistical findings regarding the aforementioned research question were explored through various statistical analysis procedures performed using the Statistical Package for the Social Sciences (SPSS). T-tests and one-way ANOVA's were performed on the demographic variables to determine if there were any significant differences between the means (averages) of different groups. Next, for each question that comprised the independent variable (Opportunity for Contact, Frequency of Contact, and Quality of Contact), one-way analysis of variances was conducted to determine if a significant relationship existed between these questions and the criterion variable Student's Racial Perceptions (SRP). Simultaneously, correlation coefficients were developed to assess the strength of the linear relation between the outcome variable (student's racial perceptions) and the predictor variables (opportunity for contact, frequency of contact, quality of contact, and demographics).

Demographics of Respondent Group

This section provides a review of the demographic data of the respondent group, including supplementary statistical information on each demographic variable to determine if there were any significant differences between the means (averages) of different groups (i.e.,

men and women) in relation to their student racial perception score. In addition, Pearson correlation coefficients were run on each demographic variable to test the strength of the linear relationship between each variable and the dependent variable (student racial perceptions). An alpha level of .05 was used for all statistical tests, Tukey B was used in all post hoc analysis, and Levene's Test of Homogeneity of Variances was used to test homogeneity of variances.

Race

Respondents who self-identified as African American/Black, Native American, Asian American, Hispanic/Latino, and Multiracial were collapsed into a minority variable due to the number of students in each racial category being too small to conduct individual statistical analysis. Those students responding to the survey included 681 (74.8%) White and 229 (25.2%) Minority students.

An independent-sample t-test was run to determine if there were differences in students' racial perception scores between minority students and majority students. Homogeneity of variances was violated, as assessed by Levene's Test for Equality of Variances ($p = .005$), so separate variables and the Welch-Satterthwaite correction were used. Student racial perception scores were higher for minority students ($M = 60.46$, $SD = 5.28$) than majority students ($M = 54.78$, $SD = 6.55$), a statistically significant difference 5.68, 95% CI [4.83 to 6.52], $t(482) = 13.212$, $p = .000$, $\eta^2 = .161$. In addition, eta-squared revealed a large effect of .161, indicating that the race of a student had a large effect on his or her SRP. Refer to Table 7 for statistical significance and effect sizes for the demographic variables analyzed using t-tests.

Pearson coefficient correlation was run to assess the relationship between student's racial perception (SRP) and their race. There was a moderate positive correlation between the race of

respondents and SRP scores, *r* (908) = .367, p<.001, with respondents race accounting for 13% of the variation in SRP scores.

Gender

Survey respondents included 496 (54.5%) female and 414 (45.5%) male undergraduate business students. No respondents identified themselves as transgender. Thus, an independent-sample t-test was run on gender (males and females) to determine if there were mean differences in student's gender and racial perception scores. Homogeneity of variances was violated using Levene's Test for Equality (p = .026), thus separate variables, and Welch correction was used. Male SRP scores (M = 55.23, SD = 7.19) were lower than the female SRP scores (M = 57.03, SD = 6.20), which was a statistically significant difference (-1.80, 95% CI [-2.68 to -.919], t(821) = -4.01, p = .000, η^2 = .017), however, eta-squared revealed a small effect of .017, indicating that the gender of a student had a small effect on his or her SRP.

A Pearson product-moment correlation was run to assess the relationship between students' racial perception (SRP) and their gender. There was a small negative correlation between respondents' gender and SRP scores, *r* (908) = -.134, p<.001, with respondents' gender explaining 2% of the variation in SRP scores.

Class Level

Of those students who completed the survey, 199 (21.9%) were freshman, 208 (22.8%) were sophomores, 212 (23.3%) were juniors, and 291 (32%) were seniors. For the purposes of analysis, freshman and sophomore students were collapsed into one mean titled underclassmen and junior and senior students were collapsed into another mean titled upperclassmen. This was done because pre-admission business students (underclassmen) share many of the same experiences, as is the case with post admission business students (upperclassmen).

An independent-sample t-test was run to determine if there were differences in students' racial perception scores between underclassmen and upperclassmen. There was homogeneity of variances, as calculated by Levene's Test for Equality of Variances (p = .387). Student racial perception scores were lower for under class students (M = 55.67, SD = 6.99) than upper class students (M = 56.69, SD = 6.47), a statistically significant difference was found, -1.07, 95% CI [-1.95 to -.194], t (908) = -2.377, p = .017, η^2 = .006, however, eta-squared revealed a very small effect of .006, which indicated that the class level of a student had a very small effect on his or her SRP.

A Pearson product-moment correlation was run to assess the relationship between student's racial perception (SRP) and the current class level of students. There was a small but weak positive correlation between the class level of respondents and SRP scores, *r* (908) = .079, p = .008, with respondents class level explaining 1% of the variation in SRP scores.

Table 7

T-Test: Demographic Variables

Demographic Variables	N	*t*	*p*	η^2
Race	910	13.212	.000	.161
Gender	910	-4.006	.000	.017
Class Level	910	-2.397	.017	.006

Note: p < .05; N = Sample Size; *t* = t-test for Equality; *p* = Significance /Probability; η^2 = Eta Squared (Effect Size)

Hometown

Students indicated the setting of the hometown in which they grew up by selecting rural (small town/village), suburban (medium city), or urban (large metropolitan city). Two hundred

and nine respondents identified with growing up in a rural setting, 615 identified their hometown as being suburban in nature, and 86 respondents identified their hometown as being urban.

A one-way ANOVA was run to determine if there were any significant differences in the hometown settings in which students grew up and their SRP scores. There was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p = .286). SRP score was statistically significantly different between students identifying with growing up in a rural or suburban hometown and those students growing up in an urban setting, F(2,907) = 14.337, p<.001, η^2 = .030, however, eta-squared indicated that the hometown of a student had a small to moderate effect on his or her SRP. Student Racial Perceptions increased from the rural (M = 55.83, SD = 6.96) and suburban (M = 55.83, SD = 6.53) to the urban group (M = 59.21, SD = 6.48). Tukey post-hoc analysis revealed that the mean increase from rural/suburban groups to urban (3.38, 95% CI [54.88 to 61.24], p<.001) was statistically significant. Refer to Table 8 for statistical significance and effect sizes for the demographic variables analyzed using ANOVA.

A Pearson product-moment correlation coefficient was run to assess the relationship between student's racial perception (SRP) and the hometown they grew up in. There was a small positive correlation between the hometown of respondents and SRP scores, r (908) = .116, p< .001, with where a respondent grew up explaining 1% of the variation in SRP scores.

Parents' Education Level

Participants were asked to pick from five descriptors that they felt best portrayed the education level obtained by their most highly educated parent. Choices included, "some high school", "completed high school", "some college", "completed college", and "graduate/professional school beyond college". For the purpose of analysis, responses "some high school" and "completed high school" were collapsed into a group identified as high school

and “some college” and “completed college” were collapsed into a group identified as college. Graduate/Professional school and beyond was not combined. Two hundred and thirty-three (25.6%) respondents identified at least one parent having a high school level education, 353 (38.8%) said at least one of their parents had a college level education, and 324 (35.6%) noted that at least one of their parents possessed a graduate or professional level degree.

A one-way ANOVA was run to determine if there were any significant differences in students’ parents’ highest education level and their SRP scores. There was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p = .088). However, there was no statistically significant difference in SRP score between the different levels of a student’s parents education, F (2,907) = .174, p =.840, η^2 = .000. Similarly, eta-squared revealed a very small effect .000, indicating no practical difference in a student’s SRP based on the level of his or her parent’s education.

Pearson correlation coefficient was run to assess the relationship between student’s racial perception (SRP) and education level of their parents. There was virtually no negative or positive correlation between the education level of respondents’ parents and SRP scores, r (908) = -.011, p = .371.

Major

Respondents were also asked to report their self-identified major. This question was used for two purposes. First, because the focus of this study is on business students, any students who did not identify themselves as a business major were excluded from analysis. Second, I was curious if there was any significant difference in the major students identified with and their student racial perception scores. Students had eight options to choose from that included accounting, finance, marketing, supply chain management, human resource management, general

management, hospitality business, and non-business major/other. For the purposes of analysis, accounting (ACC) and finance (FIN) (n=345, 37.9%), marketing (MKT) and supply chain management (SCM), (n=336, 36.9%) and human resource management (HRM), general management (GM), and hospitality business (HB) (n=229, 25.2%) were collapsed respectively, creating three grouped majors (ACC/FIN, MKT/SCM, and HRM/GM/HB). The majors were grouped this way for two reasons. One reason was because grouping the majors provided more statistically relevant group sizes than did the eight individual major groups. But more importantly, grouping majors was performed based on studies regarding the impact of individual's personality traits on ones choice of college major (Chacko, 1991; Holland, 1985; Hugstad, 1997; McPherson, 1999; Miller & Miller, 2005; and Noel et al., 2003). Research on this phenomenon has pointed towards students with similar personality traits gravitating towards similar majors. In short, decisions on which majors to group together were influenced by studies conducted on business students and which personality traits gravitate toward which business majors.

A one-way ANOVA was run to determine if there was any significant difference in the major a student identified with and their SRP score. There was homogeneity of variances ($p = .371$). In addition, there was statistically significant difference in SRP scores between the different grouped business majors, $F(2,907) = 3.081$, $p = .046$, $\eta^2 = .006$. Similarly, eta-squared revealed a very small effect of .006, indicating almost no practical difference in a student's SRP based on his or her business major. SRP score increased from ACC/FIN group ($M = 55.56$, SD 7.04) to HRM/GM/HB group ($M = 56.26$, $SD = 6.84$), to MKT/SCM group ($M = 56.84$, $SD = 6.24$), in that order. Tukey post-hoc analysis revealed that the mean increase from ACC/FIN to MKT/SCM (1.27, 95% CI [54.82 to 57.51]) was statistically significant ($p = .046$).

A Pearson product-moment correlation was run to assess the relationship between student's racial perception (SRP) and their business major. There was practically no negative or positive correlation between respondents business major and SRP scores, r (908) = .049, p = .069.

Self-Report GPA

Lastly, respondents were asked to share their self-reported current college grade point average. Due to the wide range of grades reported by respondents and to improve the statistical analysis of data, self-reported grades between 0.00 and 2.99 were grouped together (N=100, 11%), as were students with a 3.00 to 3.49 (N=374, 41.1%), and students with 3.50 to 4.00 (N=436, 47.9%).

Table 8

Analysis of Variance: Demographic Variables

Demographic Variables	df_b	df_w	F	p	η^2
Hometown	2	907	14.337	.000	.030
Parent's Education Level	2	907	.174	.840	.000
Major	2	907	3.081	.045	.006
Self-Report GPA	2	907	1.727	.178	.003

Note: p is significant at 0.05; df_b = Degrees of Freedom Between Groups; df_w = Degrees of Freedom Within Groups; F = F-Distribution; p = Significance /Probability; η^2 = Eta Squared (Effect Size)

To determine if there was any significant difference in a student's self-reported grade point average and SRP score, a one-way ANOVA was run on the data collected. There was homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance (p = .968). However, there was no statistically significant difference in SRP score between the different

levels of students' current college grade point average, F (2,907) = 1.73, p = .178, η^2 = .003. Similarly, eta-squared revealed a very small effect of .003, which indicated no practical significant difference between a student's self-reported G.P.A. and his or her SRP.

Pearson correlation coefficient was run to assess the relationship between students' racial perception (SRP) and their self-reported GPA. No negative or positive correlation was found between self-reported grade point average and SRP scores, *r* (908) = -.054, p = .051. In the next section, a review of the statistical analysis performed on the independent variables will be reviewed.

Independent Variable Analysis

One-way analysis of variance (ANOVA) was conducted on each question that comprised the independent variables (Opportunity for Contact, Frequency of Contact, and Quality of Contact). The values yielded were then used to determine if a significant relation existed between these individual questions and the dependent variable, students' racial perception (SRP). An alpha level of .05 was used for all statistical tests, Tukey B was used in all post hoc analysis, and Levene's Test of Homogeneity of Variances was used to test homogeneity of variances. In addition, Pearson correlation coefficients were run on each independent variable to test the strength of the linear relationship existing between each variable and the dependent variable (student racial perceptions). In the following paragraphs, findings of these analyses are reported.

Opportunity for Contact

The predictor variable opportunity for contact was designed to evaluate the structural diversity of students' lives. Or more simply stated, the variable opportunity for contact was designed to measure the opportunity students had to interact with individuals of other racial groups by assessing a rough estimate of the racial makeup of students' living environments,

classes, and friendship groups. The opportunity for contact was assessed using 11 questions (Q15 through Q25 on the survey – see Appendix F for a detailed listing of each question). Responses to questions in this section included: *(1) All my race (2) Almost all my race (3) About half my race (4) Almost all other race(s) (5) All other race(s)*. A score of 11 indicated numerically that a student had little to no opportunity to interact with other racial groups due to a lack of diversity in his or her environment. Whereas a score of 55 indicated that a student had numerous opportunities to interact with members of other racial groups on a regular basis.

Every question was investigated using one-way ANOVA. Levene's Test of Homogeneity of Variance showed homogeneity of variances for each question, except question twenty-five. ANOVA results showed statistical significant relation existed between each question comprising the independent variable (opportunity for contact) and students' racial perception; however, eta-squared results indicated only a medium to large effect on student's SRP for eight of the 11 questions. The following paragraphs provide a review of the ANOVA results. Detailed ANOVA results for each question can be found in Table 9.

Question 15 asked respondents to select the response that best described the racial diversity of the high school from which they graduated. A one-way ANOVA showed that SRP scores was statistically significantly different based on the racial makeup of one's high school, $F(4, 905) = 9.99$, $p < .001$, $\eta^2 = .042$. The eta-squared, however, only indicated a small effect on SRP scores (see Table 9). Based on the results of a post hoc analysis, participants who attended schools consisting of a student body of almost all other races had more positive SRP scores ($M = 59.50$; $SD = 6.14$) than did students attending high schools with racial makeup representative of the other four conditions.

Question 16 solicited students' responses in regard to the racial makeup of the neighborhood in which they grew up. Students racial perception was shown to be statistically significantly different based on the racial makeup of the neighborhood in which a participant grew up, $F(4, 905) = 7.78$, $p < .001$, $\eta^2 = .033$. However, eta-squared showed that the racial makeup of the neighborhood students grew up in only had a small effect on a student's SRP. Statistical results revealed that students who grew up in neighborhoods consisting of individuals that were mostly other races (all or almost all) had more positive racial perceptions than did those students who grew up in neighborhoods comprised of individuals who were mostly (all or almost all) the same race as the respondent.

Question 17 inquired as to racial makeup of a respondent's family. Due to the limited number of respondents that answered all other races on this question, this response option was grouped with the response option, almost all other races, for statistical purposes. Results showed that student's racial perceptions were statistically significantly different in regard to the racial diversity of their family, $F(3, 906) = 6.83$, $p < .001$, $\eta^2 = .022$. However, eta-squared indicated that the makeup of a student's family only had a small effect on their SRP. One finding of note was that student's whose families were made up entirely of members of the same race showed less positive racial perceptions than did students whose families consisted of one or more members of a different racial group.

Question 18 sought respondents' views as to the racial composition of the university/college they currently attend. There were a limited number of students who selected the response, all my race, on this question. Thus, this response option was grouped with the response, almost all my race, for statistical purposes. Based on how students described the makeup of their university/college, SRP scores were shown to be statistically significantly

different, F (3, 906) = 29.34, p <.001, η^2 = .088. In addition, eta-squared revealed a moderate to large effect of .088, indicating that the racial composition of the university/college a student attended moderately affected his or her SRP. Post hoc results found that students who perceived their college/university to be comprised of individuals mostly of other racial groups (all or almost all other races) had more positive racial perceptions than did those students who perceived their institution to consist of individuals that looked similar to them (about half or almost all their race).

Question 19 requested that students select the response that best described their closest group of friends growing up. Results showed that SRP was statistically significantly different based on the racial composition of respondents closest friends growing up, F (4, 905) = 16.25, p<.001, η^2 = .066. Eta-squared found a moderate effect between the racial makeup of a student's friends growing up and their SRP. Students whose friends growing up was entirely or mostly the same race had significantly less positive racial perceptions than did students whose childhood friendship group consisted of individuals mostly of other racial groups (about half or almost all other races).

Question 20 asked respondents to choose the response that best defined their closest group of friends in college. SRP was shown to be statistically significantly different with regard to the racial composition of respondents' closest group of friends in college, F (4, 905) = 32.33, p<.001, η^2 = .125. In addition, eta-squared indicated that the racial makeup of a student's closest group of friends in college had a medium to large effect on their SRP. Similar to question eighteen, students whose closest friends were entirely their race had significantly less positive racial perceptions than did students whose college friendship group consisted of one or

more members of another race. And like question eighteen, those students whose friends were mostly their race showed less positive racial perception scores than those respondents whose college friendship groups consisted of individuals from mostly other racial groups (about half or almost all other races).

Question 21 inquired about the racial composition of the courses respondents had taken so far in college. Due to the limited number of respondents that answered all my race on this question, this response option was grouped with the response, almost all my race, for statistical purposes. ANOVA results showed that SRP was statistically significantly different based on the racial makeup of student's college classes, $F(3, 906) = 43.55$, $p<.001$, $\eta^2 = .102$. Eta-squared revealed that that racial makeup of a student's college classes had a moderate to large effect on their SRP. Specifically, analysis showed that respondents who perceived their classes to consist of individuals half or almost entirely their race had less positive racial perceptions scores than did those respondents who perceived their classes to consist of individuals who were mostly or entirely from other racial groups.

Question 22 asked respondents to select the response option that best described the racial composition of the professional business organizations in which they were most active. ANOVA results showed SRP was statistically significantly different in regard to the racial makeup of the professional organizations in which respondents were most active, $F(4, 905) = 23.43$, $p<.001$, $\eta^2 = .094$. Eta-squared results indicated that the racial mix of the professional organization(s) in which a student was involved had a moderate to large effect on their SRP. Post hoc analysis revealed that students who participated in professional organizations whose members were mostly the same race (all or almost all) had less positive racial perceptions than respondents engaged in professional organizations with a diverse membership (half, almost all, or all other

races). Students who were involved in professional organizations with membership almost entirely another race had more positive racial perceptions than did those students whose professional organizations membership racial composition was half their race.

Question 23 directed respondents to select the response that best described the racial composition of the faculty/staff at the university/college they currently attend. As with previous questions, a limited number of students selected the response all my race on this question. For statistical purposes, this response option was grouped with the response almost all my race. SRP was shown to be statistically significantly different based on the racial makeup of the faculty and staff at the college respondents attended, $F(3, 906) = 36.81$, $p<.001$, $\eta^2 = .108$. In addition, eta-squared indicated that the racial composition of the faculty/staff had a moderate to large effect on a student's SRP. Results illustrated that respondents who perceived the racial composition of their institution's faculty/staff to be half or almost all their race had less positive racial perceptions of others than did students who described the faculty/staff of their institution being all or almost all some other race.

Question 24 requested that respondents select the response that best described the racial composition of the roommate or roommates they have had since coming to college. Student's racial perception scores were shown to be statistically significantly different based on the race of student's college roommate(s), $F(4.905) = 14.55$, $p<.001$, $\eta^2 = .060$. Eta-squared found a moderate effect between the racial makeup of a student's roommate(s) since coming to college and their SRP. Post-hoc analysis found that students whose college roommate(s) were the same race had less positive racial perceptions than respondents whose roommate(s) consisted entirely of individuals from different racial groups as well as those respondents who identified half of their roommates being of some other racial group. In addition, students whose roommates were

almost all their race had less positive racial perceptions than did respondents with roommate(s) consisting entirely of individuals from different racial groups than their own.

Question 25 asked respondents to select the response that best described the racial composition of the social activities in which they most often participate. Racial perception scores were found to be statistically significantly different in relation to the racial makeup of the

Table 9

Analysis of Variance: Opportunity for Contact

Opportunity for Contact	df_b	df_w	F	p	η^2
Q15 - What is the racial makeup of the high school from which you graduated?	4	905	9.997	.000	.042
Q16 – What is the racial makeup of the neighborhood in which you grew up?	4	905	7.775	.000	.033
Q17 – What is the racial makeup of your family?	3	906	6.830	.000	.022
Q18 – Which do you feel best describes the makeup of the university/college you attend?	3	906	29.338	.000	.088
Q19 – How would you describe your closet group of friends growing up?	4	905	16.246	.000	.066
Q20 – How would you describe your closet group of friends in college?	4	905	32.553	.000	.125
Q21 – Which best describe the students in most of the college classes you have taken?	3	906	34.553	.000	.102
Q22 – How would you describe the makeup of the professional business organizations in which you are most active?	4	905	23.427	.000	.094
Q23 – Which best describes the faculty and staff at the university/college you attend?	3	906	36.810	.000	.108
Q24 – Which best describes the roommate(s) you have had since coming to college?	4	905	14.551	.000	.060
Q25* - How would you describe the makeup of the social activities in which you most often participate?	4	108	27.239	.000	.124

Note: N = 910; p < .001; df_b = Degrees of Freedom Between Groups; df_w = Degrees of Freedom Within Groups; F = F-Distribution; p = Significance /Probability; * = Welch Robust Test of Equality of Measures; η^2 = Eta Squared (Effect Size)

social activities in which respondents most often engaged, Welch's F (4, 108) = 27.24, p<.001, η^2 = .124. In addition, eta-squared indicated that the racial mix of the social activities in which a

student most often engaged had a medium to large effect on their SRP. Results revealed that respondents who participated in social activities entirely made-up of individuals of the same race had less positive racial perception of others than did students whose social activities involved one or more individuals of another race. Even students who engaged in social activities comprised mostly of the same race had less positive racial perceptions than did respondents whose social activities included members half or almost entirely another race.

Lastly, a Pearson product-moment correlation was run to assess the relationship between student's racial perception (SRP) and the opportunity for interracial interaction (Q15-Q25). A moderate positive correlation was found to exist between the opportunity respondents had for cross-racial interaction and SRP scores, $r(908) = .349$, $p<.001$, with the opportunity for interracial contact explaining 12% of the variation in SRP scores.

Frequency of Contact

The independent variable, frequency of contact, was evaluated using questions twenty-six through thirty-four on the survey (see Appendix F for a detailed listing of each question). The measure frequency of contact was created to assess the interactional diversity of students' lives. In short, this variable was developed to gauge the frequency with which a student interacted with individuals of other racial groups. Responses to questions in this section included: *(1) Never (2) Once or Twice a year (3) Once or Twice a Semester (4) Every Week (5) Daily*. A respondent whose answers to the questions comprising this variable totaled 9 indicated a student who seldom if ever engaged members of other racial groups. However, a student whose responses totaled 45 indicated a student who interacted with members of other racial groups on a daily basis.

Each question was investigated using a one-way analysis of variance (ANOVA). Levene's Test of Homogeneity of Variance showed homogeneity of variances for each question, except Q33. ANOVA results showed a statistical significant relation between each question comprising the independent variable, frequency of contact, and student's racial perception (SRP). Eta-squared results indicated a moderate to large effect on student's SRP for eight of the nine questions. The following paragraphs provide a review of the ANOVA results. ANOVA results for each question can be found in Table 10.

Question 26 inquired as to how often respondents received tutoring from someone of a different race. ANOVA results showed SRP scores to be statistically significantly different based on how often a student received tutoring from a member of a different racial group, $F(4, 905) = 21.23$, $p<.001$, $\eta^2 = .086$. In addition, eta-squared revealed a moderate to large effect of .086, indicating that how often a student was tutored by someone of a different race moderately affected his or her SRP. Post hoc analysis revealed that students who had never been tutored by someone of a different race had less positive racial perceptions than did respondents who received tutoring even once a semester from an individual of another racial group. In addition, students who received tutoring from a member of another race on a weekly basis were shown to have a more positive racial perception than those tutored one or twice a semester by a member of a different race.

Question 27 asked respondents how often they engaged in serious conversations with students from different racial backgrounds. Results showed evidence that SRP scores were statistically significantly different based on the frequency with which respondents engaged members of another race in serious conversation, $F(4, 905) = 22.13$, $p<.001$, $\eta^2 = .089$. Eta-squared indicated that how often a student engaged in serious conversations with members of

another racial background had a medium to large effect on his or her SRP. Further analysis found that respondents who participated in serious conversations with members of another race on a daily basis had more positive racial perceptions then even those students who conversed with members of a different race on a weekly basis or less often (all four other conditions). Even students who conversed with other races on a weekly basis had more positive racial perceptions than those who seldom (once or twice a semester/year) or never conversed with members of another racial group. In short, students who conversed with other racial groups twice a semester or less were found to have poorer racial perceptions than students who identified with all other conditions.

Question 28 inquired about how regularly respondents had lived with someone from a different racial group. Results found a statistical significant difference between SRP score and how often students lived with someone of a different racial group, $F (4, 905) = 13.84$, $p<.001$, $\eta^2 = .057$. However, eta-squared results indicated that how often a student lived with someone of a different race only had a small to medium effect on her or his SRP. Further analysis found that students who had never lived with someone from another racial group had more negative perceptions of other racial groups than did those respondents who had lived with members of another race only once or twice a year or on a daily basis.

Question 29 asked respondents how often they worked with someone of another race. ANOVA results found SRP scores to be statistically significantly different based on the frequency with which respondents worked with individuals of another race, $F (4, 905) = 31.29$, $p<.001$, $\eta^2 = .121$. Additionally, eta-squared indicated that how often a student worked with someone of another race had a moderate to large effect on his or her SRP. Post hoc analysis confirms that respondents who worked with other races on a daily basis had more positive racial

perceptions than did students under all four other conditions. Even students who only worked with members of another race on a weekly or once or twice a semester basis had more positive racial perceptions than did those students who seldom (once or twice a year) or who never worked with someone of a different racial group.

Question 30 inquired about how often participants ate meals with individuals from other racial groups. One-way analysis exhibited SRP scores that were statistically significantly different based on the frequency with which students dined with members of another race, $F(4, 905) = 24.45$, $p<.001$, $\eta^2 = .097$. Eta-squared revealed a moderate to large effect of .097, indicating how often a student dined with a member of another race had a moderate effect on his or her SRP. Analysis provided evidence that students who never dined with members of a different racial group had less positive racial perceptions than respondents who ate with a member of another race once a semester or more frequently. Results also indicated that respondents who sat down to a meal with a member of another racial group on a weekly or daily basis possessed more positive attitudes about others than those who only dined with another race once or twice a year or semester.

Question 31 asked respondents how often they are taught by faculty of a different racial group. Results revealed that SRP scores were statistically significantly different based on the regularity with which students were taught by faculty from other racial groups, $F(4, 905) = 17.52$, $p<.001$, $\eta^2 = .072$. Eta-squared found a moderate effect between how often a student was taught by faculty of a different race and his or her SRP. Analysis found that students who had never been taught by someone of a different racial group had significantly less positive racial perceptions than those respondents who were taught on a weekly or daily basis by a member of another race. Most notable was that respondents who received instruction from a member of

another race on a daily basis held significantly more positive perceptions of other races than did students who responded to every other condition.

Question 32 inquired as to how often respondents dated someone of a different race. Results found statistically significant different SRP scores based on how often respondents date members of another race, $F(4, 905) = 15.41$, $p<.001$, $\eta^2 = .064$. Eta-squared indicated a moderate effect between how often a student dated someone of a different race and his or her SRP. Analysis confirmed that those students who dated someone of another race once a year or more often had much more positive racial perceptions than did those individuals who never dated a member of another racial group.

Question 33 asked respondents how often they study with someone from a different racial group. SRP scores were statistically significantly different based on how often students studied with someone from a racial group other than their own, Welch's $F(4, 273.64) = 33.89$, $p<.001$, $\eta^2 = .123$. Additionally, eta-squared indicated that how often a student studied with someone of another race had a moderate to large effect on his or her SRP. Post hoc analysis found that students who studied with students of another race once a semester or more often had more positive racial perceptions than students who only studied with a member of another race once a year or less. Furthermore, students who studied with someone of another race on a weekly or daily basis showed more positive racial perceptions than those who only studied with someone of a different race once or twice a semester.

Question 34 requested respondents to select the response which best represented how often they used the Multicultural Business Program's (MBP) services. This program is an academic unit housed in the College of Business where this study was conducted. MBP provides tutorial support, academic and career advising, professional development and other support

Table 10

Analysis of Variance: Frequency of Contact

Frequency of Contact	df_b	df_w	F	p	η^2
Q26 – How often do you receive tutoring from someone of a race different than your own?	4	905	21.233	.000	.086
Q27 – How often do you have serious conversations with students of a different race?	4	905	22.125	.000	.089
Q28 – How often have you lived with someone from a different racial group?	4	905	13.843	.000	.057
Q29 – How often do you work with someone of another race?	4	905	31.289	.000	.121
Q30 – How often do you eat meals with individuals from a different racial group?	4	905	24.449	.000	.097
Q31 – How often are you taught by faculty from a different racial group?	4	905	17.516	.000	.072
Q32 – How often do you date someone from a different racial group?	4	905	15.405	.000	.064
Q33* - How often do you study with someone from a different racial group?	4	274	33.891	.000	.123
Q34 – How often do you use the services provided by the Multicultural Business Programs in the Eli Broad College of Business?	4	905	24.193	.000	.097

Note: N = 910; p < .001; df_b = Degrees of Freedom Between Groups; df_w = Degrees of Freedom Within Groups; F = F-Distribution; p = Significance /Probability; * = Welch Robust Test of Equality of Measures; η^2 = Eta Squared (Effect Size)

services with a focus on promoting opportunities for students to engage in these aforementioned activities with a multiracial group of peers. Data revealed SRP scores to be statistically significantly different based on how often respondents used the services provided by MBP, F (4, 905) = 24.20, p<.001, η^2 = .097. Eta-squared revealed a moderate to large effect of .097, indicating how often a student used MBP services had a moderate effect on his or her SRP. Analysis of the data found that students who used MBP services and programming on a weekly or daily basis had more positive racial perceptions than respondents who used MBP once or twice a semester or less often. Even those students who took advantage of MBP services just

once or twice a semester had more positive racial perceptions than those students who never sought out its services.

A Pearson product-moment correlation was run to assess the relationship between student's racial perceptions (SRP) and the frequency of interracial contact. There was a moderate positive correlation between how often respondents interacted with other racial groups and SRP scores, r (908) = .459, p<.001, with the frequency of interracial contact explaining 21% of the variation in SRP scores.

Quality of Contact

The independent variable, quality of contact, was evaluated using just question thirty-five on the survey. The variable quality of contact was created to analyze the general feelings students' had about their interaction with individuals from other racial groups. To be exact, this independent variable was designed to determine how positive or negative students felt about their cross-racial interactions (i.e., the quality of their interactions). Questions 35 asked respondents to select the response that best described their feelings about the overall experiences they have had with people from different racial backgrounds. Response choices were: *(1) Very Negative (2) Negative (3) Neutral (4) Positive (5) Very Positive*. A student response of 1 indicates a student who felt very negative about their overall cross-racial interactions, where as a student response of 5 indicates a student who felt very positive about their cross-racial interactions.

ANOVA results revealed SRP scores to be statistically significantly different based on the quality of contact respondents had with members of a different race, F (4, 905) = 70.25, p<.001, η^2 = .237. Eta-squared also revealed a large effect of .237, indicating that how negative or positive a student's interactions were with members of another race had a large effect on his

or her SRP. Refer to Table 11 for ANOVA results. Post hoc analysis revealed that students who felt very positive about their overall experiences with members of different racial groups had significantly more optimistic racial perceptions than did students who responded to all four other conditions. However, those students who felt generally positive about her or his cross racial interactions also had more optimistic perceptions of others than those respondents who described their experiences as being neutral, negative or very negative. Even those students who described their interracial interactions as neutral (neither negative nor positive) had more positive perceptions than those who described their interactions with others as negative.

A Pearson product-moment correlation was run to assess the relationship between student's racial perception (SRP) and the overall quality of interracial contact. There was a moderate positive correlation between the quality of interracial contact students have had and SRP scores, r (908) = .486, p<.001, with the quality of interracial contact explaining 24% of the variation in SRP scores.

Table 11

Analysis of Variance: Quality of Contact

Quality of Contact	df_b	df_w	F	p	η^2
Q35 – Overall, how would you describe your feelings about the experiences you have had with people from different racial backgrounds?	4	905	70.248	.000	.237

Note: p < .001; df_b = Degrees of Freedom between Groups; df_w = Degrees of Freedom Within Groups; F = F-Distribution; p = Significance /Probability; η^2 = Eta Squared (Effect Size)

Summary

This chapter presented findings from the survey data collection. One-Way ANOVA's and t-tests were conducted on the independent variables (Demographics, Opportunity for Contact, Frequency of Contact, and Quality of Contact) to assess if a significant relationship existed

between these variables and the dependent variable students racial perceptions (SRP). Statistically significant relationships were found to exist between the demographic variables race, gender, class level, and hometown and the dependent variable, however, eta-squared revealed small effects for the demographic variables gender, class level, and hometown. On the other hand, eta-squared revealed that the race of a student had a large effect on his or her SRP. No statistical or practical significant relationships were found between a student's parent's education level, major, or student's cumulative grade point average and his or her SRP. Statistically significant relationships were found between each question that comprised the independent variables opportunity for contact, frequency of contact, and quality of contact and students racial perceptions, however, eta-squared revealed only moderate to large effects for 17 of the 21 questions (Q18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, and 34). Eta-squared revealed that the quality of contact (how positive or negative a student deemed their interracial interactions) had a large effect of .237, indicating that the quality of a student's cross-racial interactions had a large effect on his or her racial perceptions. Questions 15, 16, 17, and 28 were found to be statistically significant, but eta-squared indicated that each had only a small effect on a student's racial perceptions. The findings presented in this chapter will be discussed in further detail in Chapter 5.

CHAPTER 5

DISCUSSION, LIMITATIONS, AND RECOMMENDATIONS

This chapter presents a discussion on the findings of this study. In the following paragraphs I use the theoretical framework presented in Chapter 2 to explore how interracial interaction in undergraduate domestic business students impacts their racial perceptions of others. This discussion includes a review of the study's more notable findings and how they relate to the research question, followed by a review of the limitations and recommendations for future research and implications for practice.

To review, the purpose of this study was to determine if undergraduate business students who have higher levels of interracial contact exhibit more or less positive racial perceptions of other races. The final results of this study indicate that business students who have frequent (weekly or daily) and positive interracial interactions typically possess more positive racial perceptions than their peers whose interactions are infrequent (never, once or twice a year or semester) and less positive. More specifically, the findings show that (1) business students who reported more opportunities for contact (i.e., structural diversity) generally had moderately more positive racial perceptions than students who reported having less opportunity for interracial contact, (2) business students who identified interacting frequently (weekly or daily) with members of other racial groups had moderately more positive racial perceptions than students whose interactions were less frequent (never or once or twice a year/semester), (3) business students who rated their overall interracial experiences to date as positive or very positive possessed significantly more positive racial perceptions than students who rated their interracial interactions as neutral, negative or very negative, and (4) a business student's race significantly influences his or her racial attitude.

Opportunity for Contact

ANOVA results on questions 15 through 25 indicated that business students who reported more opportunities for contact generally had more positive racial perceptions than students who reported having less opportunity for interracial contact. These findings are largely consistent with much of the seminal research on cross-racial interaction. Numerous researchers have acknowledged the role structural diversity, or the level of diversity an individual is subject to, plays in exposing students to the racial diversity necessary to influence their perceptions of others (antonio, 1998; Chang, 1996; Chang et al, 2006; Luo & Jamieson-Drake, 2009; Gurin, et. al., 2002; Hurtado, et. al., 1999).

Each question that comprised the variable opportunity for contact was shown to be statistically significant, however, question 15 (the racial mix of a student's high school), question 16 (the racial mix of a student's neighborhood growing up), and question 17 (the racial mix of a student's family) were found to have little practical significance. Conversely, the diversity of student's peer groups (i.e., their high school and college friends and roommates) prior to and during college and the diversity of a student's college setting (i.e., the university, professional organizations, college classes, faculty/staff, and social activities they attended or were involved in) were shown to not only be statistically significant, but to also have a moderate to large effect on students racial perceptions (SRP). Questions 19, 20, and 24 inquired about the racial makeup of student's peer groups (i.e., closest high school friends, closest college friends and college roommates respectively). Students who reported having peer groups consisting of peers half or less the same race as the student were shown to possess more positive racial perceptions than students who reported their peer groups consisting of individuals entirely or almost entirely the same race as the student. These results are supported by existing research. For instance,

Pascarella et al. (1996) and Whitt et al. (2001) discovered that students who had the opportunity to interact with diverse peers showed more openness to diversity and Levin, van Laar, and Sidanius (2003) established that students who had friends outside their race had fewer biases towards racially different others. Research on the influence of having a different race roommate in college also found that students develop more positive attitudes and become generally more sympathetic concerning the racial groups to which their college roommates belong (Boisjoly et al, 2006; Duncan et al., 2003). Question 20, the racial makeup of a student's closest friends in college, was shown to have the most significant effect on a student's racial perceptions. These findings are not overly surprising since researchers from Astin (1993a; 1993b) to Tinto (1993) have found that students' peers in college play a significant role in their lives (Ellison & Powers, 1994; Engberg et al., 2004; Levin et al., 2003; Pettigrew, 1997; Sigelman et al., 1993). The role peers play in a student's lives was best summed up by Astin (1993a, p. 389) who stated, "the student peer group is the single most potent source of influence on growth and development during the undergraduate years". Questions 18, 21, 22, 23, and 25 inquired about the racial makeup of the student's college setting (i.e., the university, college classes, professional organizations, faculty and staff, and the social activities in which they engaged respectively). Students who reported being exposed to college settings consisting of individuals half or less the same race as the student were shown to possess more positive racial perceptions than students who reported their college settings consisting of individuals entirely or almost entirely the same race as the student. The racial makeup of a student's college classes, faculty and staff, and social activities were found to have the most significant effect on a student's racial perceptions. Similarly, Lopez (2004) and Chang (2002) found that students who engaged in diverse groups and social activities had improved cultural understanding and reductions in racial prejudice. In

addition, Gellin (2003) concluded that through involvement in diverse organizations and social groups students gain exposure to a variety of viewpoints and the exchange of diverse ideas that encourage students to reevaluate how they view the world. Although not unique, the aforementioned findings regarding the influence a student's peer groups and college settings has on their racial perceptions provides additional support for the extensive research that exists on the effect diverse peer groups and college settings have on students cultural knowledge and attitudes regarding race (Astin, 1993b; Chang, 2001; Chang et al., 2004; Denson, et al., 2009; Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; Inkelas, 2004; Pike et al., 2006, Tatum, 1999; Tinto, 1993).

Frequency of Contact

Findings indicated that students who interacted with members of a different race on a frequent (weekly or daily) basis possessed significantly more positive racial perceptions than those students who never or seldom engaged members of another race. These findings are not overly surprising as they are consistent with a wealth of research concerning the influence of frequent interracial interaction on racial attitudes and other democratic outcomes. Numerous studies have shown that students who regularly interact with diverse peers through a variety of experiences tend to possess more positive racial perceptions and pluralistic orientations (antonio, 2001b; Chang, 1999; Chang, 2002; Engberg et al., 2011; Gurin, Dey Hurtado, & Gurin, 2002; Hurtado, 1992; Lopez, 2004; Jayakumar, 2008; Springer, Palmer, Terenzini, Pascarella, & Nora, 1996). For instance, Pettigrew and Tropp (2006) in a meta-analysis of over a hundred interracial contact studies uncovered significant association between frequent contact amongst diverse peers and positive racial attitudes.

Every question that comprised the variable frequency of contact was shown to be statistically significant, however question 28, how often a student had lived with someone of a different race, was found to have only a small to moderate effect on SRP. In contrast, question 26, 27, 29, 30, 31, 32, and 33 (i.e., how often a student was tutored by, engaged in serious conversation with, worked with, dinned with, was taught by, dated, and studied with someone of a different race respectively) were shown to not only be statistically significant but to also have moderate to large effects on SRP. Of these seven questions, working and studying with someone of a different race was found to have the most significant effect on SRP. Being tutored by, having a serious conversation with, and dinning with an individual of a different race was found to have the next highest effect on a student's racial perceptions, with being taught by and dating someone of a different race having the lowest effect on SRP of the seven aforementioned questions. On the whole, these findings are not unusual. For instance, Hurtado (2001) established that students who studied with an individual from a different racial background often possessed more pluralistic orientations. In addition, Hurtado, Dey, and Trevino (1994) found that students who socialized with diverse peers and participated in diverse student organizations tended to also dine, study, live, and date individuals from different racial groups more frequently; which are interactions types shown by this study and others (Chang, et al., 2006; Hurtado, 2001; Whitt, et al., 2001) to be related to a student's racial attitudes and openness to diversity. Lastly, question 34, which asked students' how often they used the services provided by the Multicultural Business Programs (MBP), was also shown to be statistically significant and to have a moderate to large effect on SRP and is unique to this study. MBP is an academic unit located in the College of Business where this study was conducted and is the academic program through which I am employed. Students who reported using MBP services on a weekly or daily basis were

shown to possess more positive racial perceptions than students who only used MBP once or twice a semester/year or who never used MBP's services. The services MBP provide include holistic academic advising, peer centered tutoring, professional development programming, community service and leadership opportunities, and placement assistance. Created over 20 years ago to help improve retention rates for minorities in the business college, MBP currently serves over 1000 students a year (40-45% of which are White) and has grown into a program that promotes multiculturalism and inclusion of all students regardless of race or nationality. Although the statistical and practical significance of question 34 is similar to those questions above, it provides insight to a unique student support program that deserves further examination.

Although eight of the nine questions that makeup the independent variable frequency of contact were found to have both statistical and practical significance, what is still not known is do students with positive racial perceptions engage diverse peers more frequently or is it that students who frequently interact with diverse peers develop more positive racial perceptions. In other words, because of the correlational nature of this study, this finding does not establish a causal link between frequent engagement of diverse peers and more positive racial perceptions. What the results of this study do demonstrate is that students who choose to engage in interactions with diverse peers on a frequent (weekly or daily) basis possess more positive racial perceptions. Even though I was unable to prove causality, the independent variable frequency of contact was found to have the second strongest correlation ($r = .459$) to a student's racial perception, explaining 21% of the variation in SRP scores. Based on these results and the findings above, it is apparent that interracial interaction not only has a moderate to large effect on, but also is positively correlated to students' racial attitudes. Thus, what these findings do

provide is additional evidence to support existing research that speaks to the influence frequent cross-racial interaction has on student racial perceptions.

Quality of Contact

The independent variable quality of contact was found to have the strongest correlation (r =.486) to a student's racial perception of all variables examined in this study, explaining 24% of the variation in SRP scores. Results showed that business students who rated their overall interracial experiences to date as positive or very positive possessed significantly more positive racial perceptions than students who rated their interracial interactions as neutral, negative or very negative. Unlike the variables opportunity for contact and frequency of contact, the variable quality of contact consisted of only one question (Q35) that asked students to select the response that best described their feelings about their overall interactions with individuals of a different race. Nevertheless, this individual question was shown to not only be statistically significant but to have a large effect on SRP. Actually, how negative or positive a student deemed their overall interracial experiences was shown to have the greatest effect on a student's racial attitude of all the variables measured. These results are generally consistent with those of other studies. Gurin et al. (2002) demonstrated that positive informal interaction with individuals of other races was related to more positive civic attitudes. Astin (1993a) found that students who had positive diversity experiences reported reduced prejudice. Engberg (2007) established that students who interacted with racially diverse peers in informal settings, characterized by pleasant and positive exchanges, developed strong pluralistic orientations. In a study based on a national sample, Hurtado (2003) found that students who had more positive (open, honest, and personal) interactions with diverse peers were more likely to retain greater cultural awareness and positive civic attitudes then those students whose cross-racial interactions were deemed negative.

Another finding of interest was that 79% of students who responded to this study described the nature of their overall interracial interactions to date as being positive or very positive. Taking the above finding into consideration, even though this study found that students who interacted on a frequent (weekly or daily) basis with diverse peers possessed more positive SRP scores, the nature of these interactions would appear to play an equal if not more influential role in predicting SRP. Allport (1954) himself proposed that simple contact alone is insufficient to bring about positive changes in intergroup relations and attitudes. For this reason, Allport (1954) developed four prerequisite conditions upon which contact should be based for cross-racial interaction to result in positive effects (equal status, common goals, intergroup cooperation, and support of laws, authorities, or customs). These conditions plainly describe a setting designed to make the interactions between races as positive as possible (Gurin, Nagada, & Lopez, 2004). The findings of Pike and Kuh (2006), Pettigrew (1998), and Gurin et al. (2002) support these results. Based on these researchers thorough review of the impact of interracial interaction, they argue that the frequency of interaction is not adequate in and of itself to reduce prejudice and improve racial attitudes, but that the quality of the interaction is equally crucial.

Student's Race

Results showed that minority students were likely to exhibit less racial prejudice towards others from different racial backgrounds than White respondents when all variables were held constant. Of the demographic variables in this study, a student's race was the only one found to have both statistical and practical significance. The race of a student was found to have a large effect ($\eta^2 = .161$) on SRP, which was the second largest effect size of all examined variables. Although the demographic variables gender, class level, and hometown were all found to be statistically significant, each were found to have small effects, $\eta^2 = .017$, 005, and .030

respectively. The demographic variables parent's educational level, major, and self-reported G.P.A. were found to have no statistical or practical significance. This finding is similar to those ascertained in prior studies. For instance, Neville and Furlong (1994) found that Black students tended to exhibit more positive racial attitudes than White students and Whitt et al. (2001) found that minority students were more open to diversity than their White peers. On the other hand, these findings are also incongruent with other studies. For example, Gurin et al. (2002) found that both Whites and minorities benefited equally from cross-racial interaction, whereas Hyun (1994) found greater positive effects on White students levels of prejudice than those of Blacks. However, in a meta-analysis of studies on intergroup interaction, Engberg (2004) found that White students generally benefit the most from interracial contact and thus exhibit more positive racial attitudes after interacting with racially diverse individuals than do their minority counterparts.

When taking into consideration the significant differences that exist between different racial groups, these findings are not overly surprising (Levine & Cureton, 1998). However, these findings still leave to speculation why such varied results exist. The minorities in the current study possessing more positive perceptions could be attributable to the fact that they tend to have more interracial interactions due to the fact that although shifting, there still are more Whites (especially on predominately White campuses) than any other racial group. This numerical representation of Whites increases the chances a minority student has to interact with White students and limits the opportunity a White student has to interact with minority students (Sigelman et al., 1993). Then again, that minorities in this study possess more positive racial attitudes could also be attributed to the fact that White students and minorities tend to enter college with very unique and different attitudes about race (Astin, 1993a). As they progress

through college these differences in attitudes become more defined and amplified (Astin, 1993a). For example, a minority student may enter college with more positive racial perceptions than a White student due to the unique experiences the minority student had growing up. Already being ahead of the curve, as the minority student continues to be exposed to diverse peers in college his or her racial perceptions continue to improve. While the White student's attitude in college improves at the same rate as that of the minority student, because the White student entered college with less positive perceptions to begin with the positive nature of her or his racial attitudes still lags behind their minority counterparts. However, because this study did not examine racial differences more closely, it is difficult to speculate beyond the aforementioned possibilities.

Limitations and Future Research

Although the findings of this study add to and expand on the existing research regarding the impact of cross-racial interaction, this study still has several limitations that must be noted. First, a significant limitation to the generalizability of this study is that it focuses its attention solely on domestic undergraduate business students at one institution and more importantly in one academic area. Therefore, these findings cannot be generalized to the larger institution, other academic areas on the same campus, or other universities due to the fact that each major and campus (see Holland, 1985 and Milem et al., 2003) has their own unique student bodies and campus culture that impact the experiences of their students in ways for which this study cannot account. Future research should attempt to seek a sample comprised of different institutions or across different majors at the same institution. Involving students across a wide range of majors could help educators identify the nuances known to exist between majors (Milem et al., 2003).

Nevertheless, as an exploratory study, the results are still a strong indicator as to the relationship between the level of interracial contact and students racial perceptions.

In addition, the survey used in this study was developed for and tested on business students at a large 4-year research institution. Thus, it is possible that the survey used in this study does not translate for business students enrolled at smaller 4-year institutions, community, or private colleges. Future research may wish to investigate if this instrument is the best measure for other college types and settings.

Next, due to the small numbers of respondents in each minority racial category, I was required to combine them into one minority/multiracial category for statistical purposes. Thus, this study fails to account for the differences that research has shown exists between different racial groups (Hurtado et al., 1996; Minatoya et al., 1983). If feasible, it would be beneficial for future research to try and secure large enough samples from each racial category being studied to account for these differences. However, considering the growing diversification of colleges and universities, I can only hope that obtaining a sufficient number of respondents for each minority category may become less challenging for future researchers.

It is also important to note that I serve as an academic advisor within the College of Business where this study was conducted; therefore, many students who use the services of the program for which I work know me. As a result, some selection bias may exist in this study. Certain students could have agreed or declined to participate in this study due to their past interactions with me or the office for which I work. Although significant measures were taken to minimize such bias (see Chapter 3) these steps cannot completely address all possible bias.

Lastly, this study has attempted to account for as many variables as possible that could impact students' racial perceptions. Yet, it is difficult to isolate or anticipate the numerous

external influences that can confound the effects of those identified variables, such as a students' precollege experiences. Therefore, future research may want to look at including other controls or processes that can further minimize external confounding effects.

Implications for Practice/Recommendations

The research and discussions within higher education concerning the benefits of a diverse student body and cross-racial interaction have been pervasive. This dialogue has looked at how interracial interaction impacts everything from students' cognitive processes to their attitudes about diversity. However, with racial tensions on the rise on college campuses (SPLC, 2005; Potok, 2012) and increasing demands from corporations being placed on colleges to produce employees who possess attitudes necessary to work with an increasingly diverse workforce (as cited in Engberg et al, 2011), it appears that research on how interracial interaction influences student's racial perceptions is not only relevant but still needed. Thus, in spite of the aforementioned limitations, the findings of this study have important theoretical and practical implications.

From a theoretical perspective, the findings of this study confirm those findings of existing research regarding the influence and benefits of interracial interaction. For instance, the results of this study confirm the role structural diversity (opportunity for contact) plays in exposing students to the diversity necessary to influence their perceptions of other racial groups (antonio, 1998; Chang, 1996; Chang et al, 2006; Luo & Jamieson-Drake, 2009; Gurin, et. al., 2002; Hurtado, et. al., 1999). This study also confirms the findings of existing research on the benefits of frequent (Astin, 1993a; Engberg, 2007; Gurin et al., 2002; Hurtado, 2003; Pettigrew, 1998) and positive (antonio, 2001b; Chang, 1999, 2002; Gurin et al., 2002; Lopez, 2004) interracial interaction and racial attitudes. Results also confirm previous studies' findings as to

the significant impact student's peers and college settings have on their attitudes regarding race (Astin, 1993b; Chang et al., 2004; Denson et al., 2009; Engberg et al., 2004; Gellin, 2003; Hurtado, et al., 1999; Inkelas, 2004; Lopez, 2004; Pike et al., 2006, Tatum, 1999; Tinto, 1993). Lastly, the current study confirms the findings of existing research as to the type of activities, which when engaged in frequently have the most significant impact on student's racial perceptions (Chang et al., 2006; Hurtado, 2001; Hurtado et al., 1994; Whitt et al., 2001).

This study's findings also add to and expand on those of existing interracial interaction research. For instance, although a sizeable amount of research has been conducted on the benefits of interracial interaction little research has been conducted linking interracial interaction to a student's preparation for future employment. Understanding that the attitudes students form in college follow them into the workforce (Buttner et al., 2006), this study examined how interracial interaction impacts business students' racial attitudes. The findings of this study demonstrate that business students who engage in frequent and positive interracial interaction possess racial attitudes in line with what corporations have deemed necessary to be productive members of an increasingly diverse workforce.

This study's findings also have practical implications for business colleges and corporations. As corporations have begun to understand the impact diversity has on their ability to remain competitive they have placed added pressure on educators to develop students with a set of diverse workplace competencies they identify as necessary to traverse a diverse workforce (Bikson et al., 1994; Carr-Ruffino, 2005; Engberg & Hurtado, 2011). These diverse workplace competencies include being able to work with diverse people, to view the world from multiple perspectives, and to navigate challenging issues (as cited in Engberg et al, 2011). The inability to secure employees who possess these diverse workplace competencies directly affects

corporations' bottom line. Companies that are able to secure a diverse workforce with the skill set needed to navigate the challenges of working with diverse individuals retains a competitive advantage over its competition (Buttner et al, 2006; Carr-Ruffino, 2005; Cox, 1993; Salmon et al., 2003). Business colleges who are unable to produce graduates who possess these aforementioned diversity competencies also face the prospect of corporations taking their corporate dollars and employment opportunities to those business colleges who can provide them with students who possess the aforementioned competencies (Contreras, 2007). Therefore, it is increasingly likely that the success of business colleges will be measured by how well they prepare their students for the challenges of an increasingly diverse workforce. The results of this study (i.e., business students who have frequent (weekly and daily) and positive interracial interactions typically possess more positive racial perceptions than their peers whose interactions are infrequent and less positive) should thus prove useful to business colleges seeking to develop students with more positive racial perceptions as well as the corporations seeking to hire these students as future employees.

This study's findings also highlighted various peer groups, college settings, and activities shown to have moderate to large effects on business student's racial perceptions. Business colleges and educators can look to these results for ideas as they begin to contemplate how to provide students with opportunities to interact with diverse peers. For example, results from this study pointed to the racial makeup of business student's closest friends in college and the social activities in which they engaged having a moderate to large effect on a student's racial perceptions. Thus, business colleges could look at creating social events or programming that bring diverse groups of students together on a bi-weekly or monthly basis. This study's results also indicated that studying with and dinning with individuals from different racial groups had a

significant effect on a student's racial perceptions, which could suggest to business educators that they might want to look at creating meal time study groups consisting of individuals from racial diverse backgrounds.

The results of this study also highlight the need for whatever interracial interactions occur between students to be positive in nature. The results of this study found that students who described their interactions with other races as negative or very negative held less positive racial attitudes than their peers who describe their interactions as positive or very positive. Therefore, as business colleges and educators create opportunities for cross-racial interaction to occur, they will want to focus on making sure these interracial interaction opportunities are structured to maximize the likelihood they will result in positive cross-racial interactions. Educators should keep Allport's (1954) four specified conditions (equal group status, common goals, intergroup cooperation, and authority support) in mind when designing opportunities for positive cross-racial contact; however, they should not view these conditions as absolute. As Pettigrew (1998) pointed out, research has found that "even in situations lacking key conditions" positive contact effects are often found (p. 68). Educators looking for ideas about how to create frequent and positive interracial interaction opportunities for their students can also refer to studies by Engberg (2004) and Hurtado, et al., 1999. These two studies provide an in-depth review of various educational interventions and diverse learning environments being used by colleges that have been shown, to varying degrees, to reduce racial bias.

Given that students who used the services of the Multicultural Business Programs (MBP) on a weekly or daily basis possessed more positive racial perceptions than students who never or seldom used MBP, it is also recommended that business colleges and educators consider implementing similar academic support programs within their colleges. A unique aspect of MBP

that educators should consider is that MBP exposes students to diverse peers through activities not focused on diversity but that instead focus on promoting academic achievement, professional and leadership development, community service, and job placement. In addition, with minimal changes any business college could implement parts or the entire MBP model.

I am also employed by MBP, which is housed within the business college from which the population for this study was selected. Although academic advising is one of the main responsibilities of this office, we also work closely with corporate recruiters to place undergraduate business students for internships, co-ops, and full-time employment. Corporate recruiters regularly share with our program the skill sets they are looking for in prospective employees, one of which is the desire to secure employees capable of working with and managing diverse individuals and teams. MBP sponsors numerous programs and activities throughout the year designed to help business students develop the racial attitude and diversity skills corporations are demanding. These activities include the MBP Tutoring Program, corporate sponsored dinners, part-time job opportunities, study groups and lounges, and social activities like laze tag tournaments and golf outings. MBP also sponsors four diverse professional student organizations, which it encourages students to join. Considering that the findings of the current study showed that students who join racially diverse professional organizations, or who are tutored by, converse with, dine with, work with, study with, or socialize with diverse peers frequently (weekly or daily) possess the positive racial attitudes corporations are seeking, the findings of this study can also be used to inform our corporate recruiting partners and college administration about the effectiveness of the programming MBP currently has in place. Additionally, these results can be used to secure additional funding and support from corporations and business college administration for programming MBP sponsors that was shown by the study

to have significant effects on student's racial perceptions, such as the tutor program, leadership conferences, professional student organizations, and various social activities.

Lastly, even though this study found differences in racial perceptions between Whites and minorities (minorities were found to possess more positive racial perceptions), Cabrera, et al. (1999) found that minorities and Whites adjusted to college in a very similar manner; more importantly they found that a campus climate of prejudice negatively impacted students regardless of race. Thus, educators who are seeking to create opportunities for frequent and positive across race interactions should be careful to not only focus on improving the attitudes and perceptions of one group over another but instead focus on creating activities and opportunities for engagement that improve the racial perceptions of all students regardless of their race or ethnicity.

Conclusion

The impact of interracial interaction has been examined from a myriad of approaches and different populations; time and time again researchers have found similar results showing a wide variety of personal, institutional, and societal benefits are correlated to interactions with diverse individuals. Wishing to further examine the impact of interracial interaction, I set out to explore the relationship between interracial contact and business students' racial perceptions. In order to investigate this potential relationship, the following research question was explored: do undergraduate business students who have frequent and positive interracial interactions exhibit more or less positive racial perceptions of other races?

The results of the study can be added to the wealth of literature that has shown a connection between interracial contact and improved or positive racial attitudes (Astin, 1993a; Chang et al, 2006; Engberg, 2007; Engberg et al, 2003; Engberg et al, 2011; Hurtado, 2005;

Jayakumar, 2008; Pettigrew, 1998). More specifically, undergraduate business students who engage diverse individuals frequently (weekly or daily basis) through various activities and settings and who deem these interactions as positive in nature tend to possess more positive racial perceptions than their peers who engage diverse peers less frequently and who view their cross-racial interactions to be generally negative.

This study's findings also expand on those of existing cross-racial interaction research. Very few studies have been conducted linking interracial interaction to a student's preparation for future employment and fewer yet have looked specifically at undergraduate business students. Understanding that the attitudes students' form in college follows them into the workforce, this study examined how interracial interaction impacts business students' racial attitudes. This study demonstrates that business students who engage in frequent and positive interracial interaction possess more positive racial attitudes, which provides support for the role interracial interaction in college plays in developing men and women with the racial attitudes necessary to be productive members of an increasingly diverse workforce.

The findings of this study also have numerous practical implications for business colleges and corporations and come at a crucial time for both. Racial incidents on college campuses are becoming increasingly common. Within the last year three such incidents were reported on the campus where this study took place, one of which involved a Black doll being hung in effigy from the ceiling of a campus laboratory. Corporations are also dealing with rising costs associated with increasing discrimination and harassment lawsuits and incidents within the workplace. Within the next 10-15 years many institutions of higher education will for the first time enroll equal numbers of minority and majority students. Similarly, it is projected that by 2020 the U.S. work force will also look much different, with women and minorities holding a

majority of all available jobs (NCPPHE, 2005). So even if there is room to debate exactly when this shift will occur, all signs point to it occurring in the not too distant future. Therefore, it is of utmost importance that educators begin to look at how they serve an increasingly diverse student body, as well as how they will develop graduates with the racial attitudes and diverse work competencies corporations are seeking. Educators can use the findings of this study to begin this process.

Unfortunately, as federal and state funding for colleges and universities continues to shrink, additional funding to implement programming that creates more opportunities for interracial interaction may be difficult to come by, especially within those universities that lack strong institutional support for such diversity initiatives (Terrell, Rudy, & Cheatham, 1993). Hence, for corporations to secure diverse and democratic minded employees from these institutions, they will likely need to take a more active role by placing added pressure on university administrators to provide support for such initiatives or be faced with funding programs that promote cross-racial interaction out of their own pockets.

APPENDICES

APPENDIX A

Prenotification Email

Dear (First Name of Student):

My name is Kevin Leonard and I am a PhD candidate in the Higher, Adult and Lifelong Education program at Michigan State University. I am contacting you to bring your attention to a study I am conducting that focuses on students who are majoring in business. The purpose of my study is to try and assess how various activities impact students' perceptions of different groups of individuals.

In about a week's time you will receive an email from me with a link to a web based survey. I am hoping you can assist me with this study by completing this survey.

Please understand that your participation in this project is completely voluntary and you can withdraw from the study at any time. Should you decide to participate, your privacy will be protected to the maximum extent allowable by law.

As a way of saying thank you, all participants who complete the survey will have their name entered in a drawing to win one of 10 $**10 iTunes gift cards**.

If you have any questions about study, please feel free to contact me at: 419 Eppley Center, E. Lansing, MI 48824 or via email at leonard1@msu.edu or at 517.974.6514.

Sincerely,

Kevin P. Leonard
Researcher
Cell 517-974-6514
Office 517-353-3524
leonard1@msu.edu
419 Eppley Center
Michigan State University
E. Lansing, MI 48824

APPENDIX B

Email Request with Survey Link

Dear (First Name of Student):

My name is Kevin Leonard and I am a PhD candidate in the Higher, Adult and Lifelong Education program at Michigan State University. I contacted you a few weeks back informing you of study I was conducting regarding how various activities impact students' perceptions of different groups. At this time I am asking you to participate in this study by completing the following survey. **The survey is on-line and should not take more than 10 minutes of your time.**

Your privacy will be protected to the maximum extent allowable by law. To protect your privacy, your name will be disassociated from all responses given. In addition, your name will not be used in any written records, reports, or the final research paper. If requested, the results of this study will be provided to you.

Your participation in this project is completely voluntary. You may withdraw from the study at any time without giving reason and with no negative consequences. You may also refuse to answer any question on the survey by skipping it and moving onto the next question. If you wish to withdraw from the survey after your survey has been submitted, you can Email the researcher at leonard1@msu.edu or call 517.353.3524 to request the deletion of your information and responses from the study.

If you have questions or concerns regarding your rights as a participant in this study, or are dissatisfied at any time with any aspect of this study, you may contact my advisor, Dr. Reitumetse Mabokela (mabokela@msu.edu or 517.353.6676) or the Michigan State University Human Research Protection Program at 517.355.2180, FAX 517.432.4503, irb@msu.edu , or 207 Olds Hall, MSU, East Lansing, MI 48824.

All participants who complete the survey will have their name entered in a drawing to win one of 10 **$10 iTune gift cards**.

Clicking on the link below will take you directly to the survey where you will be asked to read and confirm your consent to participate in this research study. Thank you in advance for taking time to assist me with this study. **NOTE: If you are under 18 years of age, you cannot participate in this study without your parent's permission. If you are 18 years of age or older, please proceed by clicking the link below.**

<Link to Survey>

Sincerely,
Kevin P. Leonard
Researcher
Cell 517.974.6514 or leonard1@msu.edu

APPENDIX C

Informed Consent Form

Study on the Impact of Interracial Contact

You are being invited to participate in a research study about how interracial contact affects people's attitudes about other racial groups. Please read this form and ask any questions you may have before agreeing to be in the study. This study is being conducted by: **Kevin P. Leonard**, PhD Candidate in the Higher Adult and Lifelong Education program in the College of Education at Michigan State University.

The purpose of this study is to see what affect, if any, increased levels of interracial interaction have on students' attitudes about other racial groups. You have been selected as a possible participant in this study because as a business student you are part of a population that not only closely resembles the entire student body of Michigan State University but also because you are part of a group of individuals who will make up a significant portion of the next generation of workers entering an increasingly diverse and global workforce.

At this time I am asking you to participate in this study by completing the following survey. The survey is on-line and should not take more than **10-15 minutes of your time**. This will be a one-time survey. Upon completion of the survey, no further action on your part is required. If you are under 18 years of age, you cannot participate in this study without your parent's permission. If you are 18 years of age or older, please proceed.

Because participation is voluntary, and responses are confidential, there are no foreseeable risks associated with this research beyond those ordinarily encountered in daily life. Although you will not directly benefit from participation in this study, your participation in this study will help contribute to a deeper understanding about the impact of interracial interaction on people's perceptions.

Your participation in this project is completely voluntary. You may withdraw from the study at any time without giving reason and with no negative consequences. You may also refuse to answer any question on the survey by skipping it and moving onto the next question. If you wish to withdraw from the survey after your survey has been submitted, you can Email the researcher at leonard1@msu.edu or call 517.353.3524 to request the deletion of your information and responses from the study.

Your confidentiality will be protected to the maximum extent allowable by law. Your data will be included in a summary report along with data from others. The report will not include any information that will allow anyone to identify any of your individual responses. The data will be stored on a password-protected server, which will be accessible only by the research team. The data will be kept for at least 5 years in accordance with American Psychological Association guidelines. Only the above-mentioned researchers, their respected institutions, and the Institutional Review Board at MSU will have access to the research data.

After the data collection process is complete, there will be a random drawing from the student participant pool. Winners will each receive a **$10 iTunes gift card**. A maximum of 10 gift cards will be awarded. If you are a winner, you will be sent an iTunes email gift certificate to the Email you provided in the amount of $10.

The researcher conducting this study is Kevin P. Leonard. If you have any concerns or questions about this study, such as scientific issues, how to complete any part of it, or to report harm caused by the study, please contact the researcher at 419 Eppley Center, East Lansing, MI 48842, leonard1@msu.edu or at 517.353.3524.

If you have any questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this research study, you may contact anonymously the Michigan State University Human Research Protection Program at 517.355.2180, FAX 517.432.4503, irb@msu.edu, or 207 Olds Hall, MSU, East Lansing, MI 48824 or my advisor, Dr. Reitumetse Mabokela at mabokela@msu.edu or 517.353.6676.

Clicking the >> at the bottom of this page indicates that you have read the consent form and are voluntarily agreeing to participate in this research study allowing your data to be included in the data set used by the researcher. Once you click the >> button at the bottom of this page you will be taken to the first page of the survey. If you have decided not to participate in this study, please exit out of this page by closing it.

APPENDIX D

Follow Up/Reminder Email

(First Name of Student):

I have contacted you a couple times over the past few weeks seeking your help with a study I am conducting on how various activities impact students' perceptions of different groups.

I hate to be a bother, as I realize your time is valuable and your schedule is hectic at this time of year, but your participation in this study is crucial to helping educators and corporations gain a better understanding of how students' interactions impact their perceptions of different populations.

As a way of saying thank you for making time to participate in this study, your name will be entered in a drawing to win one of 10 **$10 iTunes gift cards**.

Again, your participation in this project is completely voluntary. At any time during the study you may refuse to provide information or discontinue your participation without giving a reason and with no negative consequences.

If you have questions or concerns regarding your rights as a participant in this study, or are dissatisfied at any time with any aspect of this study, you may contact my advisor, Dr. Reitumetse Mabokela (mabokela@msu.edu or 517.353.6676) or the Michigan State University Human Research Protection Program at 517.355.2180, FAX 517.432.4503, irb@msu.edu, or 207 Olds Hall, MSU, East Lansing, MI 48824.

Clicking on the link below will take you to the survey. Thank you again for taking time to assist me with this study.

<Link to Survey>

Sincerely,

Kevin P. Leonard
Researcher
Cell 517-974-6514
Office 517-353-3524
leonard1@msu.edu
419 Eppley Center
Michigan State University
E. Lansing, MI 48824

APPENDIX E

Follow Up/Reminder Email Sent to Minority Students

(First Name of Student):

I am seeking your help with a survey I am conducting for my PhD dissertation. Your feedback is needed for this study, without it, I feel my study will be lacking in depth and diversity.

I realize you are busy and this is finals week, but all I am asking is for 10 minutes of your time. If you could just take 10 minutes to fill out my survey, I would be very appreciative. As a way of saying thank you for making time to participate in this study, your name will be entered in a drawing to win one of 10 **$10 iTunes gift cards.**

Again, your participation in this project is completely voluntary. At any time during the study you may refuse to provide information or discontinue your participation without giving a reason and with no negative consequences.

If you have questions or concerns regarding your rights as a participant in this study, or are dissatisfied at any time with any aspect of this study, you may contact my advisor, Dr. Reitumetse Mabokela (mabokela@msu.edu or 517.353.6676) or the Michigan State University Human Research Protection Program at 517.355.2180, FAX 517.432.4503, irb@msu.edu , or 207 Olds Hall, MSU, East Lansing, MI 48824.

Clicking on the link below will take you to the survey. Thank you again for taking time to assist me with this study.

<Link to Survey>

Sincerely,
Kevin Leonard
Researcher
Cell 517-974-6514
Office 517-353-3524
leonard1@msu.edu
419 Eppley Center
Michigan State University
E. Lansing, MI 48824

APPENDIX F

Racial Perceptions Survey

The purpose of this on-line survey is to assess individuals' perceptions of other groups. There is no right or wrong answers. It should take you no more than 10-15 minutes to complete this survey. Completion of the survey is voluntary and all responses will be kept confidential to the highest extent allowable by law.

INSTRUCTIONS: Please try and answer each question from the point of view of the race or ethnicity with which you most identify. *Please answer each of the following questions to the best of your ability. Select only one answer to each question unless otherwise instructed.*

SECTION ONE

Dependent Variable = Students Racial Perceptions

INSTRUCTIONS: Below is a series of statements. Please try and answer each question from the point of view of the race with which you most identify. Please select the response that best indicates your level of agreement or disagreement with each of the following statements.

Q1. My experiences with people from racial backgrounds different than myself have been an important part of my personal growth and development.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q2. Initiatives designed to create racial equality in education and workforce settings are no longer needed.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q3. A person's ability to learn is closely related to their race.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q4. I am comfortable interacting with individuals from racial groups different than my own.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q5. Racism no longer exists in modern society.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q6. It is important to interact with people from racial groups different than my own.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q7. A racially diverse campus is beneficial for all students.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q8. Stereotypes are generalizations that accurately describe different racial groups.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q9. A racially diverse workforce is crucial for America to remain competitive in a global economy.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q10. I believe people should only marry individuals from their own racial group.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q11. I seek out opportunities to meet and learn about individuals different from myself.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q12. It is my responsibility to challenge racism when I see it.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q13. A racially diverse work environment does not provide a corporation any benefit.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

Q14. I appreciate and respect the values, ideals and beliefs of individuals from racial groups different than my own.

1 = Strongly Disagree 2 = Disagree 3 = No Opinion 4 = Agree 5 = Strongly Agree

SECTION 2

Independent Variables = Interracial Contact

INSTRUCTIONS: Below is a series of statements. Please try and answer each question from the point of view of the race with which you most identify.

OPPORTUNITY FOR CONTACT

Q15. What is the racial makeup of the high school from which you graduated?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q16. What is the racial makeup of the neighborhood in which you grew up?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q17. What is the racial makeup of your family?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q18. Which do you feel best describes the makeup of the university/college you attend?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q19. How would you describe your closest group of friends growing up? (The 3-5 individuals you played with, hung out with, talked to at least 2-3 times a week.)

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q20. How would you describe your closest group of friends in college? (The 3-5 individuals you hang out with, party with, talk to, eat with at least 2-3 times a week.)

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q21. Which best describes the students in most of the college classes you have taken?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q22. How would you describe the makeup of the professional business organizations (business fraternities and/or student groups) **in which you are most active?**

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q23. Which best describes the faculty and staff at the university/college you attend?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q24. Which best describes the roommate(s) you have had since coming to college?

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

Q25. How would you describe the makeup of the social activities in which you most often participate? (i.e. non-business fraternity/sororities, parties, tailgates, dances, university sponsored sporting events, intramural sports)

1 = All My Race
2 = Almost All My Race
3 = About Half My Race
4 = Almost All Other Race(s)
5 = All Other Race(s)

FREQUENCY OF CONTACT

Q26. How often do you receive tutoring from someone of a race different than your own?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q27. How often do you have serious conversations with students of a different race?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q28. How often have you lived (i.e. currently or previously shared apartment/dorm room) **with someone from a different racial group?**

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q29. How often do you work with someone of another race?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q30. How often do you eat meals with individuals from a different racial group?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q31. How often are you taught by faculty from a different racial group?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q32. How often do you date someone from a different racial group?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q33. How often do you study with someone from a different racial group?

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

Q34. How often do you use the services provided by the Multicultural Business Programs in the Eli Broad College of Business? (i.e. Academic Advising, MBP Tutorial Program, Resume Assistance, Mock Interviews, Corporate Presentations and Site Visits)

1= Never
2 = Once or Twice a Year
3 = Once or Twice a Semester
4 = Every Week
5 = Daily

QUALITY OF CONTACT

Q35. Overall, how would you describe your feelings about the experiences you have had with people from different racial backgrounds?

1 = Very Negative
2 = Negative
3 = Neutral
4 = Positive
5 = Very Positive

SECTION 3

Demographic Questions

Q36. How do you describe yourself?

1 = Black/African American
2 = American Indian/Alaskan Native/Native Hawaiian
3 = Asian
4 = Hispanic/Latino
5 = White
6 = Multiracial (Two or More Races)

Q37. Are you an International Student?

1 = NO
2 = YES

Q38. What is your gender?

1 = Male
2 = Female
3 = Transgender

Q39. Which of the following best describes your hometown?

1 = Rural (Small Town/Village)
2 = Suburban (Medium City)
3 = Urban (Large Metropolitan City)

Q40. Which of the following best describes the education obtained by your most highly educated parent?

1 = Some High School
2 = Completed High School
3 = Some College
4 = Completed College
5 = Graduate/Professional School Beyond College

Q41. Which of the following best describe your current class level?

1 = Freshman *(0 – 30 credits)*
2 = Sophomore *(30 – 60 credits)*
3 = Junior *(60 – 90 credits)*
4 = Senior *(90 or More credits)*

Q42. What is your current undergraduate major?

1 = Accounting
2 = Finance
3 = Marketing
4 = Supply Chain Management
5 = Human Resource Management
6 = General Management
7 = Hospitality Business
8 = Non-Business Major/Other

Q43. What is your current college cumulative grade point average? *(Self-Reported – 4.0 scale)*

Thank you for taking time to participate in this study. You have now been entered into the drawing to win one of the following prizes: 10 $10 iTunes gift cards. Winners will be notified once all data has been collected. I know that your time is valuable and I greatly appreciate yours. So thank you again for taking time out of your busy schedule to complete this survey.

APPENDIX G

Inter-Item Correlation Matrix & Scale Statistics for Instrument

Table 12

Inter-Item Correlation - Dependent Variable (Students Racial Perception)

	Q1	Q2	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
Q1	1.00	-	-	-	-	-	-	-	-	-	-		
Q2	.282	1.00	-	-	-	-	-	-	-	-	-		
Q4	.312	.125	1.00	-	-	-	-	-	-	-	-		
Q5	.139	.383	.132	1.00	-	-	-	-	-	-	-		
Q6	.503	.379	.389	.235	1.00	-	-	-	-	-	-		
Q7	.475	.382	.371	.229	.641	1.00	-	-	-	-	-		
Q8	.177	.277	.205	.200	.270	.316	1.00	-	-	-	-		
Q9	.374	.371	.290	.207	.545	.522	.230	1.00	-	-	-		
Q10	.188	.192	.358	.202	.298	.303	.269	.163	1.00	-	-		
Q11	.453	.243	.386	.082	.464	.375	.173	.349	.189	1.00	-		
Q12	.299	.216	.304	.148	.367	.370	.186	.308	.253	.350	1.00		
Q13	.330	.369	.264	.285	.458	.452	.282	.554	.246	.263	.243	1.00	
Q14	.299	.176	.443	.135	.421	.382	.236	.317	.329	.350	.303	.320	1.00

Table 13

Inter-Item Correlation – Independent Variable (Opportunity for Contact)

	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
Q15	1.00	-	-	-	-	-	-	-	-	-	-
Q16	.746	1.00	-	-	-	-	-	-	-	-	-
Q17	.210	.277	1.00	-	-	-	-	-	-	-	-
Q18	.391	.427	.159	1.00	-	-	-	-	-	-	-
Q19	.607	.648	.331	.318	1.00	-	-	-	-	-	-
Q20	.419	.511	.324	.371	.679	1.00	-	-	-	-	-
Q21	.399	.472	.216	.713	.398	.412	1.00	-	-	-	-
Q22	.409	.478	.229	.515	.469	.492	.597	1.00	-	-	-
Q23	.455	.479	.201	.630	.417	.420	.705	.574	1.00	-	-
Q24	.407	.453	.264	.424	.529	.548	.502	.478	.516	1.00	-
Q25	.432	.478	.276	.462	.550	.653	.517	.554	.523	.557	1.00

Table 14

Inter-Item Correlation – Independent Variable (Frequency of Contact)

	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34
Q26	1.00	-	-	-	-	-	-	-	-
Q27	.215	1.00	-	-	-	-	-	-	-
Q28	.221	.303	1.00	-	-	-	-	-	-
Q29	.197	.331	.246	1.00	-	-	-	-	-
Q30	.228	.506	.418	.384	1.00	-	-	-	-
Q31	.267	.198	.255	.264	.324	1.00	-	-	-
Q32	.204	.265	.264	.221	.318	.195	1.00	-	-
Q33	.305	.460	.316	.365	.572	.317	.355	1.00	-
Q34	.592	.167	.213	.206	.233	.264	.219	.333	1.00

Table 15

Scale Statistics – Dependent Variable (Students Racial Perception)

Mean	Variance	Std. Deviation	N of Items
52.01	42.564	6.524	13

Table 16

Scale Statistics – Independent Variable (Opportunity for Contact)

Mean	Variance	Std. Deviation	N of Items
25.91	56.897	7.543	11

Table 17

Scale Statistics – Independent Variable (Frequency of Contact)

Mean	Variance	Std. Deviation	N of Items
25.61	44.179	6.647	9

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