The Effects of Cultural Congruity, University Alienation, and Self-Concept upon Multiracial Students' Adjustment to College

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THE EFFECTS OF CULTURAL CONGRUITY, UNIVERSITY ALIENATION, AND SELF-CONCEPT UPON MULTIRACIAL STUDENTS’ ADJUSTMENT TO COLLEGE
THE EFFECTS OF CULTURAL CONGRUITY, UNIVERSITY ALIENATION, AND SELF-CONCEPT UPON MULTIRACIAL STUDENTS’ ADJUSTMENT TO COLLEGE

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

By

Derrick Adam Paladino, B.S., M.Ed., Ed.S.
University of Florida, 1998
University of Florida, 2001
August 2004
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Dedication

This Dissertation is dedicated to the memory of Ryan “Mitch” Mitchell, a truly dynamic individual and great friend. You are deeply missed.
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Chapter One

INTRODUCTION

Attending college is an important stage of development for many individuals. Beginning college life and becoming a student of higher education has a multitude of significant connotations. Entering college can be a transition to independence, shift towards adulthood, launching of one’s career goals, and have other positive associations. This transition is student specific and can include negative experiences and associations. For example, students may face physical and sexual violence, racism, and sexism, in addition to searching for motivation to complete college (Archer & Cooper, 1998). Students may also encounter difficulties in adjusting to classroom environment, facing low self-esteem, and experiencing depression (Bishop, Gallagher, & Cohen, 2000). Finally, moving away from home, developing new peer relationships, and striving to be academically successful can influence student adjustment to college.

In addition to these issues, minority students have additional obstacles upon entering majority populated (Caucasian) college campuses. Archer and Cooper (1998) suggest that many minorities have already faced negative social experiences of racism prior to beginning college. Most are familiar with systemic bias, discrimination, and prejudice (Wright, 2000), which can carry over to their tenure in college. In addition, students of color may retain a bond to their culture and ethnicity, which includes several characteristics. Palmer and Shuford (1996) suggest that, “College students have many ties that bind them to their families, friends, home communities, religious institutions, and other aspects of their precollege lives” (p. 214). Due to these ties, students attempt to find commonalities between their collegiate and precollegiate experience. For example,
students seek out other peers, students, and groups that share similar cultural characteristics and values (Palmer & Shuford, 1996).

Entering a majority-populated campus (i.e. Caucasian) for a minority student can be an intimidating or unsettling experience. Not every college environment is organized to meet the needs of all minority students. Only in recent years have colleges and universities regularly attempted to diversify their institution by assisting and serving diverse groups on campus (i.e.. race, sexual identity, and students with disabilities). Institutions of higher education once believed that minority students would simply assimilate into the institutional cultural environment (Palmer & Shuford, 1996). In addition, they assumed that minority students could accomplish this devoid of any effort put forth by the institution.

A main responsibility of the university should be to create an intentional multicultural and diversified institution “in which the cultures of diverse groups are not merely acknowledged or tolerated but accepted, respected, included, appreciated, and celebrated within larger institutional culture” (Palmer & Shuford, 1996, p. 215). Most colleges that maintain a multicultural affairs center concentrate on four main monoracial ethnicities. These include: African Americans, Native Americans, Latinos, and Asian Americans. Without the multicultural affairs centers providing dependable and reassuring resources, minority students may perceive themselves as outsiders and this can adversely affect the potential for positive experiences. Jenkins (1999) suggests that multicultural students arrive on campus and offer a unique presence, especially if it is a majority-populated college. Jenkins believes that multicultural students come from environments marginalized by color and economic status; they bring worldviews and sociocultural
characteristics that contrast the majority population, and often represent other world environments. This difference increases the difficulty for adjustment to a majority college population and can elicit additional reactions, such as negative personal perceptions. Perceiving themselves as outsiders and feeling forced to adjust can make minority students feel a disparity in cultural congruity and values from the institution (Gloria & Robinson Kurpious, 1996), alienated from the university (Burbach, 1972), and experience lower levels of self-concept (Neeman & Harter, 1986).

Being multiracial compounds the difficulty of minority students' acclimation to higher education. A multiracial individual has parents of two or more different racial backgrounds. The idea that being a monoracial-minority will produce adjustment problems in a majority college space, suggests that having two races will increase these difficulties. Multiracial students may face challenges that include filling out admissions forms that do not allow for multiracial identification, unwelcoming dating and social activities, and the lack of ethnic representation at the university (Gasser, 2002). Colleges and universities usually have support groups and cultural events that apply directly to monoracial-minorities (i.e. African American, Latino, Asian American). Multiracial students may not feel accepted in monoracial groups and support systems. For example, a half Latino and half Caucasian student does not necessarily feel comfortable attending an event during September's Hispanic Heritage Month. This perception can be derived from many factors, such as a lack of Latino cultural knowledge, including language, and social treatment from monoracial Latinos. As a result, the multiracial student may have difficulty finding personal space at the university, which can lead to feelings of
alienation, low self-concept, and low perception of cultural fit with the university environment.

In the limited research on the multiracial population (including less on multiracial college students), finding cultural space is a salient issue. A qualitative study by Renn (2000) on multiracial college students specifically explored patterns of situational identity. This study suggested that multiracial college students continually look for meaningful physical and psychological space to fit into. The environment (Renn, 2003) and college climate leads the individual to a determined personal perception of fit in the environment. The lower numbers of multiracial compared to monoracial-minority students on campus compounds this. The multiracial population accounts for approximately 1 to 2% of the college population (Schmidt, 1997). It is important to note that the increase in the overall population of interracial marriages (Wehrly, Kenney, & Kenney, 1999), and multiracial births will rapidly increase the population of multiracial students. Given this rise in population, it is imperative for colleges and student affairs professionals to acknowledge this rising population, become familiar with their salient issues, and attend to their needs.

Background

The multiracial population is growing and requires special attention regarding counseling and other necessities. In the year 2000, the Census first allowed individuals to identify as having more than one racial category (Jones & Smith, 2001). Though, race has been a category collected on the Census since 1979, it was limited to checking only one monoracial category. The 2000 Census allowed a once invisible population to begin identifying themselves by checking a “two or more races” category. This category refers
to “people who choose more than one of the six race categories” (Jones & Smith, 2001, p. 1). On April 1, 2000, the Census recorded approximately 281.4 million people in the United States of America. Within that population there were approximately 6.8 million multiracial individuals (Jones & Smith, 2001).

Within the 6.8 million multiracial individuals, 40% lived in the West, 27% in the South, 18% in the Northeast, and 15% in the Midwest (Jones & Smith, 2001). This statistic suggests that the United States multiracial population is widespread in the United States. In addition, Caucasian and African Americans populations had the lowest percentages reporting more than one race (Jones & Smith, 2001). The social thought on multiracial individuals is that they are mostly mixed with Black and White races. This past statistic suggests this population is made up of various combinations, making it increasingly difficult for others, to identify who is or is not multiracial. This increases the need for personal awareness in this area.

The census did not report how many multiracial individuals were college students, but did break the population in half with an under age 18 section and an 18 and over age section (Jones & Smith, 2001). The Census suggested that people who checked more than one race were more likely to be under the age of 18 (42% of the 6.8 million). In addition, multiracial individuals were more likely to be under age 18 than those reporting only one race. As interracial marriages are increasing (Wehrly et al., 1999), the number of multiracial children increases. “Between 1960 and 1990, interracial marriages increased more than 800%; in 1995 8.4%, or one in 12 marriages, were interracial” (Keller, 2001, pp. 219-235). Though not all children born will attend college, this number suggests that there could be an increasing number of multiracial individuals attending college.
Multiracial people, in general, experience life and development differently from monoracial-minority and majority individuals. They grow up dividing the margins of multiple races and can face problems fitting securely and fully into any of their partial heritages. Several factors can play an integral role in how they develop and navigate life. For example, not knowing specific parts of a monoracial culture may foster feelings of discomfort or alienation from that specific culture. Language can be a key characteristic for multiracial individuals. Wehrly et al. (1999) describe the language experience of a multiracial female whose father is Panamanian. The female (not fluent in Spanish) is unable to communicate with her father, as he is an immigrant and can only speak and conceptualize in Spanish. This becomes a significant personal loss for her as, “there is an aspect of him she will never fully know and understand” (Wehrly et al., 1999, p. 63). The language factor can also be pervasive though extended families and peer groups.

Another common issue that multiracial people confront is appearance. Not looking like either parent or other monoracial individuals can be frustrating as others wonder about their background. These individuals hear questions and comments through their lifespan such as, “What are you?,” “You don’t look Black,” and “You don’t look like your parents.” This can become increasingly frustrating and exhausting as multiracial individuals must continually explain their backgrounds and who they are. For example, Fukuyama (1999) describes an experience when a young girl called her an Eskimo. Though she is half African American and Japanese, she can remember not arguing with the girl.

Multiracial individuals may decide not to argue and explain their mixed heritage. Sometimes they decide to fit into a desirable (in their eyes) environment. For example, I
can remember telling my childhood friends that my last name, Paladino, was solely Italian (Paladino, 2002, 2003a). In fact, I come from a Puerto Rican and Italian mixed heritage. This manipulation of the truth allowed me, externally, to feel more comfortable within my peer environment. Many multiracial individuals navigate their external environment, but this can also leave them feeling guilty which affects internal self-esteem. Furthermore, lines of questions regarding one’s race can put the individual on the defensive and affect self-concept. “I became aware at a young age that this line of questioning told me I was different, and it bred a certain level of self-consciousness” (Root, 2001, p. 114). Most multiracial individuals never feel totally connected to a community. One individual expresses how he was taunted, harassed, and physically abused for being “different” in his community (Lee-St. John, 2000). Wehrly et al. (1999) describe additional issues multiracial adults encounter: experienced institutional racism, the impact of societal forces, construction of one’s identity, and interpersonal conflicts with peers and family.

Though multiracial individuals face several negative factors, they also experience positive features. Their level of strength depends on their level of comfortableness with their multiracial identity. Multiracial individuals have the ability to navigate through numerous environments and cultures. Furthermore, most individuals (whether cognizant of it or not) develop competent levels of communication and societal skills for negotiating with people and environments. What results are flexibility and strength characteristics that some monoracial individuals never develop (Wehrly et al., 1999). Some individuals enjoy their multiple heritages and happily navigate and experience all aspects of it (Lee-St. John, 2000). In addition, other strengths include having a positive
increased sense of uniqueness, having variety in their lives, and being more open and sensitive to others (Wehrly et al.).

Being a minority in college has several implications. Romero (1981) suggests that minority college students can experience identity loss due to departing experiences shared with family and peers, and others who share their unique values. Aspects that emerge from this departure are isolation and loneliness as "ties with the sending culture fade and new ties with the receiving culture have not been made or are in constant need of reinforcement" (Romero, 1981, p. 385). In addition, these students can feel alienated from the university (Burbach, 1972), different in cultural congruity and values from the institution (Gloria & Robinson Kurpius, 1996), and have lower levels of self-concept (Neeman & Harter, 1986).

Cultural congruity relates to one’s perception of the congruence between the values of the university and personal values (Gloria & Robinson Kurpius, 1996), in addition to their perception of cultural fit level with the institution. A difference in cultural congruity can leave minority students feeling like outsiders and unattached to the university. Several studies explored and demonstrated differences in cultural congruity in minority and majority college students (Constantine & Watt, 2002; Gloria, Hird, & Navaro, 2001; Gloria & Ho, 2003; Gloria & Robinson Kurpius, 2001; Gloria, Robinson Kurpius, Hamilton, & Wilson, 1999). Cultural congruity studies also have focused on and suggest gender differences (Constantine, Robinson, Wilton, & Caldwell, 2002). This variable will be further explored in the review of the literature section.

Alienation is a multidimensional concept consisting of the components powerlessness, meaninglessness, normlessness, and social estrangement (Burbach, 1972;
Burbach & Thompson, 1971, 1973) and it is measured as an individual’s perception. University alienation can affect any student, whether from a minority or majority population. Several studies have been conducted describing the negative effects and differences in alienation levels between majority and minority college students (Delphin & Rollock, 1995; Steward, Germain, & Jackson, 1992; Steward, Jackson, & Jackson, 1990). One study by Burbach and Thompson (1971) showed differences in alienation between monoracial-minority groups. Alienation studies have also focused on gender differences (Tomlinson-Clark & Clarke, 1996). The past two variables (cultural congruity and university alienation) can affect one’s self-concept. Self-concept is comprised of a variety of perceptions about the self. It can include perceptions such as appearance, creativity, relationships, intellectual ability, and scholastic competence (Neeman & Harter, 1986). These can be summarized as competencies or abilities and social relationships. If an individual feels alienated by his or her environment and does not feel congruent with the values of his or her institution while remaining in that environment, it is possible that there will be a decrease in one’s level of self-concept. Alienation and self-concept will be explored further in the review of the literature section.

Transition from Adolescence to Adulthood

College can be both an exciting and trying experience for students. Most college students are at the point in their life when they begin the transition to adulthood. This developmental change is due to an increase in new relationships, responsibilities, and new experiences. Erickson (1993) created a psychosocial model that describes this transition during young adulthood and the entire lifespan. The stages throughout the life span are: (a) Basic Trust vs. Basic Mistrust, (b) Autonomy vs. Shame and Doubt,
(c) Initiative vs. Guilt, (d) Industry vs. Inferiority, (e) Identity vs. Role confusion, (f) Intimacy vs. Isolation, (g) Generativity vs. Stagnation, and (h) Ego Integrity vs. Despair.

The psychosocial developmental stage, Intimacy vs. Isolation occurs during young adulthood and is relevant when studying college-aged individuals (18 to 23 years old). In this stage the main goal is for young adults to begin forming meaningful and intimate relationships (Erickson, 1993). During the college years, these relationships occur in friendships, peer groups, social support networks, and partner relationships such as girlfriend, boyfriend, and marriage. An adolescent or adult that is successful in this stage has “the capacity to commit himself [or herself] to concrete affiliations and partnerships and to develop the ethical strength to abide by such commitments” (Erickson, 1993, p. 263). Individuals who are not able to develop intimate relationships may begin to isolate themselves from others. Failure in this stage may also lead to alienation, which provides a poor college experience and difficulty developing a health identity.

College Student Development

To gain a complete understanding of the general research sample population (multiracial college students), it is vital to examine adjustment issues and experiences that general college students encounter. Chickering (1978) developed a college student development model, which describes several tasks students encounter. According to Chickering’s (1978) College Student Development theory, a student will undergo seven vectors of development. They are (a) Achieving Competence, (b) Managing Emotions, (c) Becoming Autonomous, (d) Establishing Identity, (e) Freeing Interpersonal
Relationships, (f) Clarifying Purposes, and (g) Developing Integrity. Each vector of development has major components.

The first vector, Achieving Competence, is comprised of three major components: intellectual competence, physical and manageable skills, and social and interpersonal competence. Chickering (1978) believes that, “The sense of competence [is] the confidence one has in his ability to cope with what comes and to achieve successfully what he sets out to do” (p. 9). In the second vector, Managing Emotions is the notion that management of emotions is a primary problem of self-control for college students. In this vector students must experience emotions such as, aggression, anxiety, and fear before emotional control may take place. In the third vector of development, Becoming Autonomous, the student may have hesitancy to let go of his dependant relationships with family, friends, and peers. To successfully complete this vector, the student must be, “free of continual and pressing needs for reassurance, affection, or approval” (Chickering, 1978, p. 12).

Entering, Establishing Identity depends on the successful resolution of the competence, emotion, and autonomy vectors. This vector involves clarification of physical needs, personal appearance, and clarification of sexual identity and roles. Freeing Interpersonal Relationships, the fifth vector of development, progresses as one’s identity is established. This occurs as students become able to “open up” to other individuals without preconceived conceptions and can increase more intimate and personal relationships. The sixth vector of development is Clarifying Purposes. In this stage students make intentional strides to process and understand personal and professional domains. These domains include, avocational and recreational interests,
vocational plans and aspirations, and considerations about general life style (Chickering, 1978). The final vector, Developing Integrity, involves creating a set of personal beliefs and values that guides the students' behavior (Chickering, 1978).

The Multiracial Population

Being multiracial is a unique experience in that developing a mixed heritage identity is challenging. Identity development is a key issue in the multiracial population and has been studied by several researchers (Carter, 1995; Jacobs, 1977, 1992; Kerwin & Ponterotto, 1995; Phinney, 1993; Phinney & Alipura, 1990; Poston, 1999; Root, 1990, 1999). Root's (1999) Ecological Model of Racial Identity development looks at constructs that influence ability to become a fully integrated multiracial individual. She proposes that, "many persons live with multiple secondary statuses that interact with race and necessarily influence the salience of race and the formation of racial identity" (Root, 1999, pp. 67, 69). In this model, a multiracial individual exists within four main constructs: Gender, Class, Regional History of Race Relations, and Generation. Within these constructs are three core-grouped lenses with subcategories. The core lenses are Inherited Influences, Traits, and Social Interactions with Community. These lenses are all dynamic in that they influence each other as the multiracial individual moves toward or away from their racial identity. In the Social Interactions with Community lenses there are five contexts including School/Work. A Student's college environment can have a major affect on their identity. For example, peers, faculty, and the overall campus environment interactions will affect a multiracial college student's identity. If this experience is negative, then integration of their identities becomes challenging.
In addition to identity development theory, there are themes that describe how a multiracial individual experiences everyday life. Root (1994) developed six major themes that are related to a mixed heritage individual. These themes emerge in adolescence and become pervasive throughout young adulthood. Like Root's (1999) Ecological theory, peers, family, and social environment all are significant contributors to how a multiracial individual experiences these themes. The six major themes are: Uniqueness, Acceptance and Belonging, Physical Appearance, Sexuality, Self-Esteem, and Identity. The first theme, Uniqueness, interfaces with the five other major themes (Wehrly et al., 1999). This theme consists of overbearing feelings that one is different and is always misunderstood. The Acceptance and Belonging theme is a concept of feeling accepted and connected to environment, peers, family, and dominant society. The Physical Appearance theme emerges more in multiracial women than men (Root, 1994; Wehrly et al.), however it is not mutually exclusive to one gender. This theme generates feelings that one does not look like the dominant or minority population. These individuals feel they have to continually explain personal background and race.

The fourth major theme where issues and concerns arise for multiracial individuals is Sexuality. This theme is also associated with women. It rests on the myth that mixed heritage women are more desirable. The Self-Esteem theme also interacts with the other five major themes. “Much of a person’s self-esteem comes from feeling special, valued, connected and accepted” (Root, 1994, p. 471), therefore if there are negative personal experiences in the aforementioned themes it is probable that self-esteem will be affected. The last major theme is Identity. This theme relates to feeling connected with and a part of one’s multiracial heritage.
Purpose of the Study

The purpose of this study is to examine key factors that relate to the self-perception of cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) in multiracial college students. One goal of this study is to discover if there is a relationship between cultural congruity, alienation, and self-concept among multiracial college students. In addition, this study will examine what factors predict cultural congruity, university alienation, and self-concept in multiracial college students. Finally, this study will explore the relationship of cultural congruity, university alienation, self-concept, and specific demographic constructs with multiracial college students.

Significance of the Study

Despite an increase in the population of multiracial individuals, there has been limited research on the development and identity of multiracial college students (Renn, 2000). This population not only has been ignored in the literature, but on some college campuses. Multiracial individuals may face numerous challenges acclimating to a college environment. In addition, these college students view the racial meaning of their identity according to their peer culture (Renn, 2000). If student affairs professionals and campus peer culture do not focus on the potential issues of this population, multiracial students may have a poor college experience.

Results from this study will bring about awareness of the rising multiracial college population for student affairs and higher education professionals. Since there is not a significant amount of literature, additional research can show the need for more
attention to the multiracial college population. In addition, new research can prompt further exploration with this population, including sampling procedures and psychological constructs. Finally, an institution's increase of multiracial population awareness can foster such outreach as support, social groups, and demonstrate their attention to students needs.

Scope of the Study

This study includes multiracial traditional college students from several colleges and universities within the United States. The study examines possible relationships between cultural congruity, university alienation, and self-concept experienced and perceived by multiracial college students.

Assumptions of the Study

Several assumptions underlie this study. First, the researcher assumes that the participants investigated are a representative sample of multiracial college students as this is a nationwide survey. Second, the researcher assumes that the participants' responses are sufficiently free of error. Third, the researcher assumes that the variance reflected in the assessment items is reflected some by the inclusion of multiracial college students in biracial/multiracial social or support groups.

Research Questions

RQ1: What is the relationship between cultural congruity, university alienation, and self-concept among multiracial college students?

RQ2: What psychological constructs predict university alienation among multiracial college students?

RQ3: What psychological constructs predict self-concept among multiracial college students?
What is the relationship between cultural congruity, university alienation, self-concept, and specific demographic constructs among multiracial college students?

General and Specific Research Hypotheses

GRH 1: There is a relationship between cultural congruity, university alienation (powerlessness, meaningfulness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

SRH 1.1: Multiracial college students will demonstrate a low level of cultural congruity.

SRH 1.2: Multiracial college students will demonstrate a high level of university alienation (meaninglessness, powerlessness, and social estrangement).

SRH 1.3: Multiracial college students will demonstrate a low level of self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth).

GRH 2: There is a relationship between university alienation (meaninglessness, powerlessness, and social estrangement) and specific psychological constructs among multiracial college students.

SRH 2.1: Multiracial college students will demonstrate a high level of powerlessness over and above meaninglessness and social estrangement.

SRH 2.2: Multiracial college students will demonstrate a high level of meaningfulness over and above powerlessness and social estrangement.

SRH 2.3: Multiracial college students will demonstrate a high level of social estrangement over and above powerlessness and meaningfulness.

GRH 3: There is a relationship between self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) and specific psychological constructs among multiracial college students.
SRH 3.1: Multiracial college students will demonstrate a low level of perceived intellectual ability over and above perceived scholastic competence, perceived social acceptance, appearance, and global self-worth.

SRH 3.2: Multiracial college students will demonstrate a low level of perceived scholastic competence over and above perceived social acceptance, appearance, global self-worth, and perceived intellectual ability.

SRH 3.3: Multiracial college students will demonstrate a low level of perceived social acceptance over and above appearance, global self-worth, perceived intellectual ability, and perceived scholastic competence.

SRH 3.4: Multiracial college students will demonstrate a low level of appearance over and above global self-worth, perceived intellectual ability, perceived scholastic competence, and perceived social acceptance.

SRH 3.5: Multiracial college students will demonstrate a low level of global self-worth over and above perceived intellectual ability, perceived scholastic competence, perceived social acceptance, and appearance.

GRH 4: There is a relationship between cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement), self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth), and specific demographic constructs (sex, parental college experience, older sibling college experience, and pre-college cultural experience) among multiracial college students.

SRH 4.1: Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

SRH 4.2: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)
SRH 4.3: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

SRH 4.4: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

SRH 4.5: Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above parental college experience, older sibling college experience, and pre-college cultural environment among multiracial college students. (Run 10 times)

SRH 4.6: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above older sibling college experience, pre-college cultural environment, and sex among multiracial college students. (Run 10 times)

SRH 4.7: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above pre-college cultural environment, sex, and parental college experience among multiracial college students. (Run 10 times)

SRH 4.8: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above sex, parental college experience, and older sibling college experience among multiracial college students. (Run 10 times)
Delimitations

Although several advantages exist in this study, delimitations are also present. First, only multiracial college students in support or social groups were sampled. Second, multiracial college students were only sampled from multiracial student organizations. Finally, samples were secured through convenience and snowball method sampling.

Definitions and Operational Terms

For the purposes of this study, the following definitions will apply:

1. *Biracial* “refers to a person whose parents are of two different socially designated racial groups” (Root, 1996, p. ix).

2. *Cultural Congruity* relates to one’s perception of the congruence between the values of the university (or institution) and their personal values or as their perception of cultural fit within the university environment (determined by experience of values, beliefs, and expectations for behaviors) (Gloria & Robinson Kurpius, 1996).

3. *Minority* is a status that relates to the “inferior and unequal rank in power and access to resources of a subordinate and disadvantaged group in relation to the superiority in power and resources of the dominant majority” (Lum, 2003, p. 123).

4. *Monoracial* refers to individuals who claim a single racial heritage (i.e. African American, Caucasian, Native American) (Root, 1996).

5. *Monoracial-Minority* refers to individuals who claim a single racial heritage that is of minority status.
6. *Multiracial Couples* refers to couples that have partners from two or more different socially designated racial groups.

7. *Multiracial Individuals* “refers to people who are of two or more racial heritages” (Root, 1996, p. xi). This includes biracial individuals. These individuals self-identified themselves as Multiracial by participating in the study.

8. *Race* “refers to the way a group of people defines itself or is defined by others as being different from other groups because of assumed innate characteristics” (Baruth & Manning, 2003, p. 9).

9. *Self-Concept* is comprised of a variety of perceptions about the self. It can include perceptions such as appearance, creativity, relationships, intellectual ability, and scholastic competence (Neeman & Harter, 1986).
   
   a. *Appearance* is a domain within self-concept and asks about perception of physical attractiveness and happiness with one’s looks.

   b. *Global Self-Worth* is a domain within self-concept and refers to, “one’s general feeling about the self, assessed with items such as liking the kind of person one is, and liking the way one is leading one’s life” (Neeman & Harter, 1986, p. 3).

   c. *Intellectual Ability* is a domain within self-concept and assesses a more global intelligence.

   d. *Social Acceptance* is a domain within self-concept and looks at personal satisfaction with one’s social skills, and the ability to make friends easily.

   e. *Scholastic Competence* is a domain within self-concept and is directed toward competence levels with mastering coursework.
10. *Students of Color* refer to, “students from the U.S. and other countries of African, Asian, Latin American, Native American Indian, or mixed ancestries” (Jenkins, 1999, p. 17)

11. *University Alienation* is a multidimensional concept consisting of the components meaninglessness, powerlessness, and social estrangement that are perceived by college students at a university or institution (Burbach, 1972; Burbach & Thompson, 1971, 1973).

   a. *Meaninglessness* is a domain within university alienation and is viewed as feelings of purposelessness and having conflict of norms (Dean, 1961).

   b. *Powerlessness* is a domain within university alienation and is a feeling of helplessness and lack of control (Dean, 1961).

   c. *Social Estrangement* is a domain within university alienation and is a feeling of loneliness

**Summary**

Chapter one has provided an overview for the need to explore cultural congruity, university alienation, and self-concept of multiracial college students. There is little research available on this population and a significant portion of it is qualitative. In addition, much still needs to be learned about what issues affect multiracial college students on a wider view. From the literature, many factors impact an individual in the adolescent/young adulthood period. These transitional issues can be impacted not only by new environments, but also by multiple identities. Research studying this impact on multiracial college students can facilitate universities to create intentional environments and positive experiences for these individuals. Along with this overview, chapter one
described developmental issues from adolescence to adulthood, college student
development theory, and multiracial identity development theory and themes. Finally, the
purpose of the study, significance of study, scope of study, assumptions of the study,
hypotheses, delimitations, and definition and operational terms were presented.
Chapter 2
REVIEW OF THE LITERATURE
College Student Issues and Development

College is a transitional time into adulthood for many individuals. For example, students may be moving away from home environments, which includes family, friends, and significant others. In addition, students are positioned into a situation where independence must occur on some level. They will face issues that have never emerged in the past and personally experience them on their own. Colleges and universities are increasingly witnessing diverse issues on campus. Some recent issues are increases in violence, higher incidences of suicidal gestures/psychological disorders, and a rise in substance abuse (Jenkins, 1999). In addition, students are facing personal development, levels of identity resolution, balancing demands (work, class, extracurricular, social, and family), homesickness, alienation, isolation, academic self-concept issues, and ability to seek support (Newman & Newman, 1999). One reason for the aforementioned current issues is the influence of a growing student population that has adjustment concerns (Jenkins, 1999). This includes students of color in White institutions, first generation students, students from low socioeconomic status, transfer students, and returning students.

These issues can perpetuate a disruption to student success and experience. Many students enter the transition to college with the impression that there will not be a significant lifestyle change from high school (Romero, 1981). This complicates adjustment and coping skills. Tomlinson-Clarke (1998) suggests that additional factors
that add to this complication are culture, interests, skills, and aspirations. There have been additional studies that explore the nature of this transition.

Schwitzer, Robbins, & McGovern (1993) found that students with low goals instability and high levels of sense of campus support reported higher levels of adjustment than those that did not have support. In addition, Bettencourt, Charlton, Eubanks, Kernahan, & Fuller (2000) suggest that improvements in adjustment to college are associated with development in collective self-esteem. Finally, classroom climate can influence students' adjustment in college. There are several factors of classroom climate and they are a charged learning environment, instructor concern for students, hostility and competition in the classroom, intellectually challenging, and supportive and student-centered (Winston, Vahala, Nichols, Gillis, Wintrow, & Rome, 1994). There are several issues that college students face during the transition to college and university life. Many issues pervade the entire student body, however students of color may have these issues magnified simply by their racial, ethnic, or cultural identity.

Minority College Students

Colleges and universities have recently become increasingly diverse compared to past years (Jenkins, 1999). Up until the 1970's the population was constructed of White students with middle to upper class socioeconomic status (Chickering & Kytle, 1999). With the university population defined (as majority) there is increased adjustment difficulty for students of color. Burbach and Thompson (1971) suggest that issues can arise as minority students enter an environment that corresponds with the dominant society. Even though there has been an increase in minority populations at colleges and universities, not all institutions have prepared to create an intentional environment of
positive support (Jenkins, 1999). For minority students, their transition from home to college includes more than typical isolation faced by most students. The distance they experience from their previous lifestyle includes dynamic issues such as family, culture, and same race peers (Romero, 1981). Without this support, they may encounter racism and discrimination from the university environment alone. This includes majority populated faculty (Pope-Davis & Ottavi, 1992), as well as students and community. Some issues they may face are hate speech (Downey & Stage, 1999), a desire to have relationships with faculty of their own color (Noel & Smith, 1996), and experiencing significantly higher levels of stigmatization than White college students (Harvey, 2001).

African-American college students are an example of this minority. They are sometimes the most prominent minority on campus and still face similar transitional issues as majority population students, but also discrimination, racism, low support systems, and minimal interaction with faculty of color. Immediately as African-American students arrive on campus discrimination can occur. In a study comparing 10-year trends on racism against African Americans, incoming White students felt equally negative towards African Americans (Balenger, Hoffman, & Sedlacek, 1992). This can leave minority students feeling unwanted and incompatible with the university. In addition, negative feelings emerge. This includes feelings of discomfort and isolation (Hunt, Schmidt, Hunt, Boyd, & Magoon, 1994). The demographics or population of the institution further exacerbates these feelings. Nottingham, Rosen, and Parks (1992) reported that African American college students reported higher levels of isolation at a predominantly majority college than a predominantly Black institution.
Thompson, Neville, Weathers, Poston, and Atkinson (1990) suggest that African American college students attending a majority-populated institution may also experience paranoid feelings and mistrust toward Caucasians for adaptation and survival. This in turn affects behaviors such as building support systems. Taub and McEwen (1991) reported that when regarding seeking and building meaningful interpersonal relationships, Caucasian women have less difficulty in this transition than African American women. This potential of minimal support systems for African Americans can also reduce their chance in joining or attending university groups and programs as it may be more predictable that they would be in the minority of attendees (Mitchell & Deli, 1992).

The Multiracial Individual

History

Having one ethnicity, such as an African American student, can make the transition and acclimation to higher education challenging. When an individual has more than one ethnicity, the ability to feel connected with groups and the university can diminish. Only recently, since the year 2000, have multiracial individuals been able to identify themselves through the Census by having the ability to check more than one ethnicity (Jones & Smith, 2001). In 1910, multiracial individuals were forced to identify themselves solely as the minority ethnicity they possessed. This was clearly defined from the Jim Crow laws and called the “One Drop Rule” (Wehrly, Kenney, & Kenney, 1999). For example, a child with both African American and Caucasian ethnicities must identify himself or herself as African American. This rule was developed to protect “whiteness”
and maintain a racial hierarchy (Root, 1992). Though only initially accepted in the South, five years later Whites in the North adapted this identification.

Interracial marriage was not legal until the year 1967. By 1920 many of the states in the nation adopted antimiscegenation laws that acknowledged Black-White marriages as illegal and criminal (Spikard, 1989). In 1967, the U.S. Supreme Court’s decision in the Loving vs. Virginia case repealed antimiscegenation laws allowing interracial unions. Not all states agreed with the Supreme Court’s decision and 12 states remained (Root, 1990) until they were ultimately forced to overturn their antimiscegenation laws. Root states, “the hierarchical social status system based upon color has oppressed biracial people in two major ways” (Root, 1990, p. 577). First, multiracial individuals have been given little choice of how they choose to identify themselves. Physical appearance now causes monoracial individuals to assume the ethnicity of a multiracial individual. Even if an individual who is Caucasian and Latino chooses to identify himself or herself as Caucasian, society may decide different. Society may conclude that the individual is Latino due to a possible darker skin tone. Second, oppression from society’s silence on biculturalism lasted a long time until the late 1960’s. Since race is still viewed through a lens of single color, it is difficult for multiracial individuals of today to feel accepted (Root, 1990).

Tessman (1999) suggests that the multiracial movement and politics are seen as a betrayal to monoracial heritage. In addition, identifying outside one distinct monoracial identity challenges the paradigm (Kahn & Denmon, 1997). Even though antimiscegenation laws were repealed in 1967, multiracial individuals were forced to identify themselves as monoracial. Since 1977, individuals have been identified as
American Indian or Alaskan Native, Asian or Pacific Islander, Black, and White in addition to Hispanic origin (Schmidt, 1997). This leaves approximately a 25-year gap between monoracial and multiracial identifiers. Depending on one’s generation, identifying as a multiracial individual has seen different levels of difficulty (Root, 2002). In all, “the civil rights movement, the repeal of antimiscegenation laws, integration of neighborhoods, and a decrease in White opposition to interracial marriage constitute the climate in which multiracial people currently reach adulthood” (Root, 1997, p. 32).

Within this climate, multiracial individuals have been associated with numerous positive and negative slang identifications.

The term *Hapa* is Hawaiian word meaning “mixed.” This usually pertains to individuals of Asian and Caucasian mix and is seen as a positive identification (Reed, 2001). Examples of negative terms are half-breed, half-caste, high-yellow, mixed blood, mutt, redbone, mongrel,metis, and Creole (Reed, 2001; Sundstrom, 2001). Additional terms associated with identifying multiracial individuals are mulatto, mixed, Eurasian, mestizo (Tessman, 1999), Latinegra (Comas-Diaz, 1996; Cruz-Janzen, 2001), and ameriasian (Root, 1990). Identification is only one issue or theme that multiracial individuals encounter.

*Multiracial Issues and Themes*

Recently since the 70’s, there has been an upsurge in research on multiracial individuals and families. The earliest mention of individuals with multiple ethnicities in literature was in 1937 by Everett Stonequist in the “Marginal Man.” He described the marginal man as, “one whom fate has condemned to live in two societies and in two but not merely different but antagonistic cultures” (Stonequist, 1937, p. XV). His description
of being marginal depicts a suffering individual. That is, encompassing two or more
historic traditions, languages, or religions is harmful. Stonequist also suggests that
physical features make an individual separate from his or her parents. This can provoke
feeling of isolation and personal conflict. He continues, “Living in two social worlds,
between which there is antagonism and prejudice, he experiences in himself the same
conflict (Stonequist, 1937, p. 25). Root (1990) also discusses marginal individuals and
believes this term was developed because of their ambiguous ethnic identity and society’s
refusal to acknowledge multiple races (Root, 1990). Cruz-Janzen (1999) suggests one
major theme of multiracial individuals is the continuous feeling of an ongoing struggle in
a society that is hostile to people of color and especially of mixed-race decent. This is
amplified by living in environments where ethnicity is accepted in categorical boxes.
Other general themes and issues surrounding multiracial individuals have surrounded
race, family, acceptance, difference, isolation, and intrapersonal and interpersonal
conflicts (Root, 1990).

Maria Root (1994) developed a model of six themes that illustrate issues and
concerns that multiracial individuals encounter. They are (a) Uniqueness, (b) Acceptance
and Belonging, (c) Physical Appearance, (d) Sexuality, (e) Self-Esteem, and (f) Identity.
The uniqueness theme interfaces with all of the other areas. This area describes feelings
of dissimilarity to other individuals and groups. The multiracial individual may feel that
no others can relate to any of his or her life experiences. This perception may lead to
changes in behavior and communication to adjust to other racial groups. For some
individuals the feeling of being special and uniqueness may be strongly associated with
not belonging (Deters, 1997). In addition, a lifetime of uniqueness can be associated with feelings of isolation, self-doubt, and depression (Root, 1994).

The key concept in the Acceptance and Belonging area is connectedness. “Multiracial people do not fit the rigid racial labels developed by the dominant society to preserve color lines” (Wehrly et al., 1999, p. 108). As in many monoracial cultures there is usually a group that individuals feel comfortable with and connected to. Even if multiracial individuals are involved in the monoracial groups associated with their separate ethnicities, they may not feel totally accepted by them. They may encounter negative comments such as being labeled an imposter by members from each monoracial identity (Williams, 1999). Furthermore, this increased alienation can make multiracial individuals ignore positive feedback and convert it to negative feelings as they become very sensitive (Root, 1990). This leaves them with an ongoing struggle to navigate and maneuver through their dual-identities and discover an experience that results in a personal connection or fit.

The third theme is Physical Appearance. Though Root (1994) describes this theme as more significant for multiracial women, men also experience feelings in this area. Multiracial individuals stand apart from monoracial individuals with characteristics such as skin color, facial features, hairstyle, and hair texture. In addition, having a name that does not match his or her physical appearance is related (Wehrly et al., 1999). This leaves multiracial people to continually explain what they are as they are asked, “what are you?” or “where are you from?” Awareness from these comments can heighten feelings of otherness and increase negative feelings (Root, 1990). Brunsma and Rockquemore (2001) further suggest that multiracial individuals do not make decisions
solely based on their appearance, but how they believe others perceive their appearance. This suggests a strong association between appearance and identity.

The fourth theme is Sexuality and is significant for multiracial women. Multiracial women are sometimes seen as exotic and as sexual objects. Though this theme is built on myth, when associated with the theme entitled Acceptance and Belonging, the resulting behavior of multiracial women can range from celibacy to promiscuity.

The fifth multiracial theme is Self-Esteem. This theme is impacted by the individual’s experience with the other five areas. Self-Esteem is an issue where a multiracial individual is controlled mainly through an external frame of reference rather than internal. One example is how a “mixed-race person may try extremely hard to be good or be an exemplary citizen in order to combat overt or covert negative evaluations their parents’ interracial union or their multiracial heritage” (Root, 1994, p. 471). Another example, related to the Sexuality theme, describes a multiracial woman that believes increasing her dating activity will make her feel wanted, desirable, and liked by many individuals. Some multiracial individuals are not at a psychological disadvantage concerning self-esteem when compared to monoracial individuals (Phinney & Alipuria, 2001).

The last theme is Identity and includes experiencing feelings of belonging and connectedness. Root (1994) suggests that Identity can also emerge because of feelings related to exclusion, which include depression, isolation, anxiety, and anger. A multiracial individual’s identity can be situated at different sides of a continuum from, no awareness of identity, to monoracial identity, to full integration of ethnicities. Some
multiracial people grow up exclusively knowing what it is like to be monoracial and at an early age do not know what it is like to be two or more races (Williams, 1999). Physical features such as skin color increase the difficulty of identity development and resolution. Deters (1997) suggests that this occurs since it is challenging for society to identify a multiracial person physically. Multiracial individuals must deal with the ambiguity of their race unlike other individuals (Deters, 1997), which complicates their identity development.

Racial Identity

"Racial identity refers to people’s beliefs and attitudes about their own race and that of others" (Mitchell & Deli, 1992, p. 39). Racial identity can span several reference points including internal and external areas (Harris & Sim, 2002). An internal reference point is what one believes about oneself and an external reference point is how one individual experiences beliefs about another. Racial identity is not a characteristic that simply emerges; rather it develops out of personal experiences with similar and diverse ethnicities, family contact, environmental situations, peer relationships, and personal reflection. The developmental level of identity can influence various areas of an individual’s life. For example, Pope (1998) suggests that racial identity influences psychosocial adjustment in minority college students. In addition, psychological health can be influenced by the identification of a racial identity state (Tessman, 1999). Racial identity development is best explained through models. Depending on the an ethnicity there are several models that discuss identity development at different stages of and individual’s life. Most racial identity development models are developed with monoracial individuals in mind.
Black Racial Identity

To understand the complexity of multiracial identity development, this section will review identity development from one monoracial-minority. Cross (1971) introduced a five stage Black racial identity model. In this model, an African American individual has the potential to experience and achieve the stages of Pre-encounter, Encounter, Immersion-Emersion, Internalization, and Internalization-Commitment.

In the Pre-encounter stage the African American individual will identify mostly with White culture and make many attempts to reject or deny his or her Black culture. Their world is viewed as non-Black or anti-Black, which pushes their perceptions of Caucasian identity to a superior level. In this stage, assimilation is the perceived solution to all experienced African American problems. The second stage is Encounter. Within this identity stage, the African American individual will reject his/her earlier identification with Caucasian culture and eliminate denial of Black culture. This individual will actively seek information and raise awareness about what it is like to be an African American. This can be a time of confusion for the individual as he or she progresses through an identification transition. In this stage, they may still identify with the White culture while they explore, as it is a place of comfort. The third stage, Immersion-Emersion, describes an individual that fully identifies with Black culture. In addition, they also retain a negative connotation with White culture. This feeling may be displayed through efforts to belittle in order to establish that one is a major part of the African American culture. The fourth stage is Internalization. This stage also characterizes an individual that internalizes Black culture, but with the addition of a
desire to transcend racism. The final stage, Internalization-Commitment, describes an individual that internalizes Black culture and fights general cultural oppression.

Historically, racial identity development models have mostly depicted monoracial individuals. One way this was distinguished was through physical features. Hall (2001) states, “On the basis of race implied by skin color traditional models accordingly dictate the direction of identity theory” (p, 333). Only a fraction of models have made accommodations for multiracial identity (Root, 2002). To increase awareness, knowledge, and understanding of the multiracial experience identity development models must expand beyond monoracial models.

**Multiracial Identity**

Multiracial identity is a complex process due to the multiple identities these individuals must process. This can become increasingly complicated because mixed heritage individuals experience rejection from both members of both racial groups (Reed, 2001). In addition, due to embedded conception of race in the U.S., multiracial identity development has become challenging (Deters, 1997). In order to strive for a healthy existence, multiracial individuals need to increase awareness and construct a new reality. This reality should result in a, now personal, categorization in order to live with their multiple identities (Root, 1997). This complexity is illustrated through a study done by Wallace (2001). This qualitative design sampled 15 mixed-heritage high school and college students and examined their racial identification. Wallace found that 33% of mixed-heritage students identified with holding and merging multiple perspectives. That is, they were able to experience both of their racial groups. 60% of these students shifted racial foreground and background defining their ethnicity through situational experiences,
40% claimed a multiracial identity, and 73% held a primary identity and ventured into others.

Dynamic experiences also affect identity development and attainment. Interaction with social contexts that include peers, extended family, and community are major influences (Pinderhughes, 1995). Tashiro (2002) conducted a study examining social experience and identity formation of multiracial adults. Twenty multiracial individuals (aged 45 - 94) were sampled. This study suggested that as a result of social experiences, various racial identities could emerge. Two of the most significant were cultural identity and ascribed racial identity. Cultural identity is described as one’s core values and personal way of being in the world. This is influenced by family and community experiences. Ascribed racial identity is developed out of how one is defined by others.

Identity can shift through environments. In a study by Harris and Sim (2002), they found that multiracial children (grades 7 through 12) gave various responses about how they identify themselves in different environments. 6.8% of the surveyed youth reported they identified themselves as multiracial at school. In addition, 3.6% reported identifying themselves as multiracial at home. Only 1.6% identified themselves as multiracial in both contexts. 54% of home multiracial population was not multiracial at school and 75% of the school population was not multiracial at home. It can be suggested that depending on the level of acceptance within each environment (home vs. school) individuals will navigate through multiple identities thus creating a fluid multiracial identity.

As seen in the above influences on multiracial identity, monoracial identity models cannot be all inclusive of individuals with multiple heritages. Root (1997) states, “The multiracial context challenges current models on at least six counts” (Root, 1997, p.
33). The first count is that multiracial identity challenges monoracial models of racial identity because of the generic retreat into ethnic communities such as Cross’ (1971) Immersion-Emersion stage. For example, not all African Americans may accept multiracial individuals with some Black ancestry. They may view them as traders or outsiders. The second challenge looks at an absence of additional characteristics that help define identity in monoracial models. This includes class, gender, nationality, race, as well as others. A third challenge illustrates monoracial models oblivion to racial shifts. Most models do not address shifting from foreground to background within environments. The fourth challenge is, models have been informed by a limited sample. A fifth challenge suggests that physical appearance is not directly addressed in monoracial models. As aforementioned, in the multiracial themes section, skin color and other physical attributes of individuals of mixed heritage can affect identity development. Finally the sixth challenge is that, for individuals that are also European, there is not a great deal of literature on the process, which makes individuals increasingly aware of their whiteness.

Recently there has been an increase in multiracial research and literature (Aldarondo, 2001; Brunsma & Rockquemore, 2001; Gasser, 2002; Harris & Sim, 2002; Renn, 2003a), which has lead to an enhanced level of understanding with racial identity. Multiracial identity models have been developed that examine biracial and multiracial individuals from social, individual, and environmental contexts (Jacob, 1992; Kerwin & Ponterotto, 1995; Kich, 1992; Poston, 1990; Root 1999; Stonequist, 1937). Identity development models are constructed with a final phase of identity resolution. Developmental multiracial models generally have the final phase describe an individual
who integrates their ethnicities. However, some multiracial individuals never reach this stage. Root (1990) describes four possible resolutions to a multiracial identity. The first resolution is acceptance of the identity society assigns and this is a passive decision by the individual. For example, a multiracial individual may reside in an environment where there is less freedom to choose identity. In this situation racial oppression can be a key. In the second resolution the individual identifies with both racial groups. This is positive if the personality remains similar across groups; they feel privileged in both groups, and experience no alienation from both groups (Root, 1990). The third resolution describes a multiracial individual who identifies with a single racial group. This active process is not viewed as the result of oppression. In this identity resolution, the decision is not based on influences of family, society, physical features, and siblings. The last resolution is identification as a new racial group. This occurs as individuals move fluidly through groups and do not feel marginalized (Root, 1990). This identity resolution is derived from feeling strong connections to other multiracial individuals, as they can understand and share similar experienced issues. It is helpful for multiracial individuals to be able to accept both sides of their racial heritage. Encompassing this ability to negotiate the margins of multiple cultures with comfort is positive (Root, 2001). However, it is important to understand that they have the right to define their racial identity. There are countless multiracial individuals that have a variability of racial labels (Phinney & Alipuria, 2001).

**Biracial Identity Development Model.** Carlos Poston (1990) developed his biracial identity development model from a discovery of limitations of monoracial identity development models. He critiqued past models and listed his conclusions:
These models imply that individuals might choose one group's culture or values over another at different stages.

Models suggest that individuals might first reject their minority identity and culture and then the dominant culture.

These models do not allow for the integration of several group identities.

All models require some acceptance into the minority culture of origin, particularly during the immersion stage. (p. 152-153)

Due to this critique, Poston (1990) developed a biracial identity development model which contains the following stages: (a) Personal Identity, (b) Choice of Group Categorization, (c) Enmeshment/Denial, (d) Appreciation, and (e) Integration. In the Personal Identity stage, the individual is typically a young child and does not identify himself or herself based on ethnicity. This identification, independent of heritage, is loosely based on factors such as self-esteem and self worth that are learned through family dynamics. In stage two, Choice of Group Categorization, the youth feels pressure to choose one specific ethnicity. This pressure is derived from environmental, personal, or social support factors such as family dynamics and influence, peer ethnicity, neighborhood demographics, society, knowledge of language and culture, physical characteristics, and school. This is a time of alienation and crisis for the individual and it is unlikely that a biracial identity will be chosen. The third stage is Enmeshment/Denial. At this stage, the individual begins to experience guilt, confusion, and self-hatred about their previous identity decision. Due to these personal feelings, this becomes the most difficult stage. In addition, the biracial individual may project feelings onto either of their monoracial parents, believing that they were part of the influence. Negative feelings of past racial denial must be resolved for the individual to advance to the next stage. If feelings are too heightened the multiracial individual may remain in the Choice of Group Categorization stage.
The next stage, Appreciation, describes an individual that begins to experience their other ethnicity. This exploration can consist of talking to parents and family, reading books, joining appropriate monoracial support groups, developing peer relationships within the appropriate monoracial group, and getting involved in cultural activities. In order to remain safe during this exploration, the individual may still identify with the ethnicity chosen in stage two. The final stage is Integration. In this stage, the biracial individual is able to recognize and appreciate all ethnic identities. Individuals will experience wholeness, integration, and security (Poston, 1990).

Poston (1990) believes several issues and assumption become clear as a result of this biracial identity model:

1. Biracial individuals might tend to have identity problems when they internalize outside prejudice and values.
2. Numerous factors influence individuals’ identity (e.g., family and peer influences).
3. Biracial individuals may experience alienation at the choice phase and make a choice, even if they are uncomfortable with it.
4. The choice of one identity over another at the choice phase and the resultant denial can be associated with feelings of guilt and disloyalty.
5. Integration is important and is associated with positive indicators of mental health.
6. The most difficult time of adjustment and identity confusion is during the choice phase and the enmeshment/denial phase. (p. 154)

Ecological Influences on Racial Identity Development Model. Maria Root (1999) developed an Ecological Model of multiracial identity that was later revised in 2002. This model developed out of the absence of specific considerations of geographic history, class, gender, sexual orientation, or generation when addressing ethnic identity. In addition, this model moved identity development from a bipolar framework to include multiracial identities (Root, 1999). Root (1999) states that her ecological framework allows for three possibilities, “(a) there may be many different outcomes of racial identity
and it will become increasingly harder to evaluate these outcomes in a stratified way, (b) racial construction, although historically rooted, is dynamic, and (c) many persons live with multiple secondary statuses that interact with race and necessarily influence the salience of race and the formation of racial identity (pp. 67, 69).

The Ecological Model (Root, 1999) begins with four main contexts that are gender, class, regional history of race relations, and generation. She states that, "environments are discerned as learning places for corroboration and challenges to one’s identity" (p. 77). These four contexts/environments are where the multiracial individual learns social rules about their ethnicity and is a base for identity development. For example, geographic location can influence the level of attained identity (Root, 2002). Stephan and Stephan (1991) found that multiracial university students in New Mexico and Hawaii were not lower in self-esteem, did not act more negative in their intergroup relations, and were not more alienated than single heritage students. This example shows the ecological influence of region, as those states are the highest in multiracial population. In addition, identity is based on interpretations of "interpersonal transactions through political, gendered, and class positions with regions history of race relations" (Root, 1998, p. 240). Within these contexts are three groups of lenses, which impact each context by way of dynamics. The three interactive lenses of the Ecological Model are inherited influences, traits, and social contexts with community. There are eight variables within the inherited influences lens: phenotype, sexual orientation, home values, names, extended family, nativity, parent’s identity, and languages at home. "The inherited influences include both biological and environmental inheritance" (Root, 1999, p. 78). Biological inherited influences include phenotype, sexual orientation, and influence the
acceptance from family, community, and others. Phenotype is associated with physical features such as hair texture, hair color, and how this affects other’s identification of the multiracial individual. Environmental inheritance variables consist of home values, names, influence of extended family, nativity, parent’s racial identity, and languages spoken at home.

The second lens, traits, consists of four variables that are environmentally influenced. They are temperament, social skills, talents, and coping skills. These variables typically make up one’s personality (Root, 1999). Other associated traits are giftedness, health, and learning difficulties. The third lens, social interactions with community and geographic location take place in social contexts. Root (1999) suggests five contexts that contain most social interactions. They are home, school/work, community, friends, and contexts outside an individual’s community. Social environments affect how identity is perceived through insiders and outsiders of that environment. For example, Poussiant (1984) suggests that identity development can be influenced by availability of supportive social networks, such as school, neighborhoods, and family.

As these three lenses interact, they influence racial and ethnic identity. Racial and ethnic identity may span from a monoracial identity to a multiracial/biracial existence. In all, this model is significant as it “considers the evolution of ethnic and racial identity development in relationship to other statuses” (Root, 1999, p. 67). This supports the environmental influences of multiracial students as they enter college. Multiracial college students may be entering environments that are very different from their previous social and family contexts. This may have a negative or straining affect on their identity.
attainment. For example, identity may suffer as a result of failed interactions through the many social systems such as monoracial-minority groups, monoracial-minority/majority population faculty, and students. This can further push them into attaining an identity that increases an external frame of self-concept.

Multiracial College Students

Multiracial college students are faced with the same issues and identity development challenges as those that do not make this transition to higher education. In addition, they also encounter similar experiences as monoracial-minority college students. Having a multiple identity existence can make this transition increasingly difficult, as they may not find a social support network that accepts their mixed ethnicity on campus. Though this can be a common issue at their original residence, with family and previous environments, it increases as they enter an atmosphere or society with less support and acceptance. “It is the marginal status imposed by society rather than the objective mixed race of biracial individuals which poses a severe stress to positive identity development” (Root, 1990, p. 578). For multiracial individuals, (and as seen in Root’s Ecological model), knowledge and beliefs from childhood and adolescence influence how environments are experienced. These beliefs and knowledge also shape how a multiracial individual approaches the college experience and environment (Renn, 2003a). In addition, Renn (2003a) suggests, multiracial individuals that have not encountered opportunities, precollege, to explore their mixed heritages, have difficulty relating in college and feel like outsiders in the monoracial set-up.

The results of Census 2000 brought awareness to the vast population of multiracial individuals across the nation. In addition, there is an increase in interracial
marriages, which also increases the multiracial children population. With this increase of mixed race individuals, there is a rising population especially in college (Schmidt, 1997). Regardless of rising numbers in the university environment, little is known about their development and the university’s affect on their identity (Renn, 2000).

College can be the first time that multiracial students explore and are challenged about their multiracial heritage (Alvarado, 1999; Gasser, 2002). Typical issues they may face are filling out admissions forms, building social experiences, dating, moving away from family and cliques, and witnessing a lack of representation in academics, departments, and population (Gasser, 2002; Root, 1990). Root (1990) suggests that these issues force painful identity conflict to the surface. For example, as multiracial individuals fill out college admissions forms they may notice that the instructions dictate to “check one box” under the race category. Most universities do not offer a box for multiple identities besides “other.” This can leave multiracial colleges students with increased feelings of alienation. Geography can also play a role for multiracial individuals. Moving to a less diverse college environment than their original hometown can amplify these issues (Aldarondo, 2001).

Identity issues faced by multiracial individuals in a college environment are not their own fault. Hart-Webb (1999) suggests that the oversight by student affairs professionals can increase internal conflict with mixed identity. The same can also be said for the rest of the university’s role. For example, many schools celebrate monoracial holidays that are ethnic specific (i.e., Martin Luther King day, Black History Month, Chinese New Year, and other single heritage celebrations) (Wardle, 2000). The absence of celebrations of multiracial identity, add to the alienation of multiracial college
students. They may feel unaccepted and/or of low significance to the university.

Academic life is also a challenge as they face difficulties identifying mentors, faculty, and representative staff population (Gasser, 2002). Williams, Nakashima, Kich, and Daniel (1996) suggest that general cultural education, such as sociology, literature, and arts; have not included sections that examine the multiracial experience.

Overall, research has suggested that students prefer to self-disclose to other students that share similarities, such as ethnicity (Noel & Smith, 1996). In the college setting this is fostered through cultural support groups and other functions. If a college does not offer social groups, multiracial individuals may have a difficult time finding each other. This is important since resolving dual identity occurs when they feel they belong somewhere (Deters, 1997). Renn (2003b) suggests that identity development occurs in campus Microsystems, such as in monoracial organizations, but these monoracial support groups have boundaries. Although unfortunate, many multiracial individuals become accustomed to not having their heritages affirmed in academic settings, whether from support groups, academics, or overall population (Williams, Nakashima, Kich, & Daniel, 1996).

There have been few studies conducted exploring the issues that multiracial college students face. A significant amount of all multiracial college student research has been achieved by way of qualitative methods leaving smaller student samples. Nishimura (1998) conducted a qualitative study exploring multiracial college students' attitudes regarding their challenges experienced on campus. From this study, Nishimura discovered four themes and concerns. Students for this sample were taken from an undergraduate multiracial support group called SHADES. Participants included nine men
and seven women enrolled in a private midwestern university. The qualitative assessment procedure occurred through one focus group session.

The first theme uncovered that race is an ever-present issue. It was discovered that the majority of multiracial students grew up in homes where race was not discussed. “Messages such as, color doesn’t matter, [and] we’re just people, were meant to be loving, but group members viewed such a perspective as unrealistic” (Nishimura, 1998, p. 49). This leaves the student in a state of confusion about his or her own ethnicity. A second theme is lack of empathy and love. Students expressed their difficulty sorting through group and individual identity issues. They made the claim that few people, including their parents, know what it is like to be a multiracial person. A third theme suggests multiracial identity development is a complex process. Students found that even if they desired to explore their other heritages, they uncovered challenges. Joining the multiracial college group brought new awareness to them as they found it difficult to relate to traditional university monoracial-minority groups. Finally, students reported not wanting to isolate themselves from other students, along with no desire to promote multiracial exclusivity (Nishimura, 1998).

Another qualitative study by Gasser (2002) explores facets of the multiracial college student experience. Six participants for this study were carefully selected due to their ages/years in school and involvement or lack of involvement in student support services. Gender and racial background was also controlled to provide an even distribution. Data was gathered through 90-minute individual interview sessions. Four major themes were extrapolated from the interviews from four questions. The first theme is, there are variations in self-definitions and pressure to choose a monoracial identity to
fit in. One of the key influences for this theme was appearance. The second theme revolved around common needs of multiracial college students. Overall, they reported that there was a need for social connections and peer group allegiances. This did not exclude immersion into a race previously denied. A third theme, students described how personal and academic needs were not met in classes and with the university. Finally, multiracial students reported that if they do not choose a single racial identity, they were ignoring a part of themselves, in addition to dishonoring their parents (Gasser, 2002).

Renn (2000) conducted a qualitative study on 24 multiracial college students from three New England institutions. The four main components of the study were “individual interviews with all participants, written responses by participants, observations of and archival data about each campus on the topic of multiracial issues, and a focus group of 3-4 students per campus” (Renn, 2000, p. 403). Two main themes from this study became the idea of space and peer culture. Renn (2000) describes space as the following, “I mean both the public spaces of social groups, formal student organization, and physical space in which students felt as if they belonged as well as the private space of students’ reflection and intimate conversations about who they were and who they wanted to become” (p. 405). Peer culture is described as, “the forces often tacit that shape life on campus in terms of group membership, acceptance discourse, and desirable behaviors” (p. 405). Regarding space, students found that some borders were not permeable in public space, due to culture, physical appearance, and participation in legitimizing activities. Participants experienced finding space at different levels ranging from the desire to transfer, to content within the university. Two factors affect the theme, peer culture:
A qualitative study conducted by Renn (2003b) explored the influences of postsecondary environments on the identities of 38 multiracial college students. Study suggested that four college environment contexts affect multiracial identity development. The contexts were originally derived from Bronfenbrenner’s (1979, 1993) ecology model and applied to campus environments. The contexts are microsystems, mesosystems, exosystems, and macrosystems. The first context is microsystem (face-to-face interactions on campus) affected how the individuals perceive their fit within the campus environment, in addition to how easily they could move from one identity-based space to another. An example would be moving from one monoracial system to another. One multiracial student discussed her feelings about being in the Filipino Alliance on her campus,

"Because I don’t have any easily identifiable Filipino traits, such as speaking a Filipino dialect, eating Filipino food at home, or even simply having a Filipino name, I often feel unsure that I share in [a common] Filipino experience, and I think that others in the group are feeling the same uncertainty about me” (Renn, 2003b, p. 11).

This multiracial student also felt that her race was a significant factor of discomfort when trying to fit in with the majority population.

The second context, mesosystem, occurs when two or more microsystems interact. “These interactions in the mesosystem support the formation of campus peer culture” (Renn, 2003b, p. 7). The mesosystem had effects on one or more racial identification patterns and influenced desirability for involvement in various groups within the campus environment. One multiracial student decided not to interact with
monoracial-minority students as she felt they isolated themselves. This isolation works negatively in constructing a multiracial identity. Exosystems, the third context, “exist when the individual’s developmental possibilities are influenced by a setting that does not contain her” (Renn, 2003b, p. 7). An example of these settings can be described as university faculty decisions. Multiracial students reported that the exosystem played a role in their awareness of racial identity by way of institutional forms (checking one box) and curriculum.

The last context is macrosystem. “The macrosystem defines and is defined by patterns of developmental possibilities held in the face-to-face and second-degree influences of the micro-, meso-, and exosystems, as well as the interaction between and among those systems” (Renn, 2003b, p. 8). This context extrapolated ideas about who the multiracial students thought they were and might become, therefore influencing their identity. This was somewhat influenced by their experiences with recent commercialization, exotification, and commodification of multiracial identity though the media (Renn, 2003b).

A qualitative study by Gillem, Cohn, and Throne (2001) describes the course of racial identity development in two biracial (Black and White) college students. Research was conducted through semi-structured interviews. Themes emerged focusing on what issues affected these two students’ multiracial identity development. Issues that negatively affected the attainment of multiracial identity were being alienated or “cut off” from one side of the family (either from marriage or chosen identity), being called names (such as wigger), experiencing discrimination, being teased about appearance from
monoracial-minority peers, feeling isolated from monoracial-minority peer, and dating as some were told they were not Black enough.

Finally, a qualitative case study by Valades, Gillespie, Seaberry, and Okhamafe (1997) describes a summary of 10 interviews with a multiracial (half German and half Mexican) college student, Dave, who had difficulty finding space on campus. This student struggled through school due to the following issues: appearance (playing soccer with White students as Hispanic students glare at him, feeling like he did not belong in the Latino student organization, and name calling (i.e., Spic). These results were shown to college students and the researchers received feedback on the multiracial college student's experience. Multiracial students who reviewed this case study reported that they could identify with Dave, which caused them to openly disclose their racial identity. Other non-multiracial students viewed Dave's issues as an individual problem showing weakness and lack of will power.

Through this review of literature, it can be assumed that multiracial college students encounter a variety of negative experiences affecting their identity. Most studies were conducted in states that have a lower population of multiracial individuals. Multiracial individuals from states of higher populations may have a different experience (Stephan, 1992). All of these studies were conducted form by qualitative research methods. Though this view allows for a deeper look into the issues of multiracial individuals, it only serves to explore certain areas of the United States. Qualitative research allows for small samples. This research trend is supported by limited ways to search for large samples of multiracial individuals. Employing a nationwide quantitative
study of these individuals can allow for further validity of the suggested issues
multiracial individuals face.

Cultural Congruity

Literature on cultural congruity has been limited since the assessment’s creation
in the recent years. Cultural Congruity relates to one’s perception of the congruence
between the values of the university and their personal values (Gloria & Robinson
Kurpius, 1996) and it is seen as a significant factor related to academic persistence. In
addition, cultural congruity is a self-assessment of one’s perception of cultural fit within
the university environment (determined by experience of values, beliefs, and expectations
the Cultural Congruity Scale through piloting and administering the assessment to 454
Chicano/a undergraduate students at two large southwestern universities. Strong internal
consistency was found for this scale. Cultural congruity is assessed to, “gain a better
understanding of the factors that impact the success or failure of Chicanos/as in higher
education to enhance the probability of their obtaining the education needed to complete
in today’s society” (p. 533). Results suggested that higher cultural fit is related to positive
persistence decisions. Since this initial study, cultural congruity has been assessed in
African American, American Indian, Latino, Asian American, and female populations.
To this date there has not been any literature examining cultural congruity specifically
with the multiracial population. However, Gloria and Kurpius (1996) did make the
statement that, “Individuals belonging to two or more cultures may experience cultural
incongruity if the cultures are different in values, beliefs, and expectations for behaviors”
(p. 535). This suggests the need for examining individuals with multiple ethnicities to assess levels of cultural congruity. In the following section, the reviewed studies have all used the Cultural Congruity Scale.

Gloria, Robinson Kurpius, Hamilton, and Wilson (1999) examined the influence of social support, university comfort, and self-beliefs on persistence decision of 98 African American students at a predominantly Caucasian populated university. Study results suggested that a positive perception of the university environment was related to higher cultural congruity. In addition cultural congruity was significantly correlated with persistence decisions. Participants who perceived a greater cultural fit were more likely to persist in college. The researchers suggest a rationale that individuals may have developed bicultural skills to work within the majority population. University environmental factors can affect levels of cultural congruity (Gloria & Rodriguez, 2000). African American students also reported that having at least one same-race mentor may have led to their less academic stress. When diversity is valued, (even by one faculty member) students feel valued, accepted, understood, cared about, supported, and powerful (Jenkins, 1999). When not valued, students (that do not identify with the dominant population) feel unworthy, estranged, isolated, do not feel at home, trespassing, and alienated (Jenkins, 1999).

Gloria and Robinson Kurpius (2001) examined the influences of self-beliefs, social support, and university environment comfort on the academic nonpersistence decisions of 83 American Indian undergraduate students. Results suggested that cultural congruity, and comfort within the university environment significantly predicted academic nonpersistence decisions of American Indian undergraduates. “Specifically,
students who viewed the university environment more positively and perceived a greater fit between themselves and university culture made fewer nonpersistence decisions” (Gloria & Robinson Kurpius, 2001, p. 97).

In a study by Gloria, Hird, and Navarro (2001), 716 undergraduates were examined the relationships between cultural congruity and perceptions of the university environment to help-seeking attitudes. Differences were examined by sociorace, which included two groups, White students versus racial ethnic minorities. Though White students were compared to ethnic minorities including 15 biracial and multiracial students, the study did not examine any between-group differences and within-group differences in the minority sample. Results suggested that racial ethnic minorities and males “had lower help-seeking behaviors and lower cultural congruity than Whites and females, respectively” (Gloria, Hird, & Navaro, 2001, p. 555). In addition, the racial ethnic minority group had less positive perceptions of university environment.

Constantine, Robinson, Wilton, and Caldwell (2002) conducted a study examining perceived social support and self-esteem as predictors of cultural congruity among 151 Black and Latino college students enrolled in predominantly White Midwestern state universities. Results suggested that Black and Latino women reported higher levels of cultural congruity than males. One possible rational for this result is that there was a higher reported population of Black and Latino women on campus. In addition, higher collective self-esteem and social support were both associated with higher cultural congruity.

Constantine and Watt (2002) conducted a study looking at 165 African American women attending historically Black institutions (HBI) and predominantly White colleges
and universities. Results indicated that African American students at HBIs reported higher levels of cultural congruity and life satisfaction than White students attending predominantly White colleges and universities.

Gloria and Ho (2003) examined academic persistence of Asian Americans in regards to their environmental, social, and psychological experiences. One-hundred sixty Asian American undergraduate students from six different Asian American sub-ethnicity groups were sampled. Results indicated that cultural congruity was strongly associated with higher family and peer support, and higher cultural congruity was strongly related to higher sense of self-esteem.

University Alienation

Experiences in college range on a negative to positive continuum. These experiences can leave students feeling as if they do not belong in the environment due to how they are treated. One such feeling is university alienation. In this section literature will be reviewed on this feeling, identified as university alienation. Social alienation, “involves a persistent perception of being isolated or removed from others” (Lane & Daugherty, 1999, p. 1). Burbach (1972) suggests that universities contain the same alienating features of the larger society. Alienation is viewed as a multidimensional concept consisting of components including powerlessness, meaninglessness, and social isolation (Burbach & Thompson, 1971; Burbach & Thompson, 1973; Dean, 1961). Dean (1961) defines powerlessness as a feeling of helplessness and lack of control. Meaninglessness is viewed as feelings of purposelessness and having conflict of norms. Finally, social estrangement is characterized as an individual experiencing separation from society or their environment. Burbach and Thompson (1973) believe that the root
cause of these feelings can be traced to manipulative social structures. Furthermore, these structures diminish the individual, producing estrangement from self and others.

Alienation has been viewed as a factor affecting college students. It has a predictive nature of producing negative outcomes in college students (Lane & Daugherty, 1999), such as attrition (Nottingham, Rosen, & Parks, 1992). Institutional alienation is one form that affects nonretention (Mohr, Eiche, & Sedlack, 1998). In addition, social environments can promote expressions of acceptance or rejection (Jenkins, 1999).

Jenkins (1999) suggests that alienation can also negatively affect students of color. If minorities on campus do not feel valued chances rise that they will not have a positive experience. In this section, the reviewed studies have all used the University Alienation Scale.

Cabrera and Nora (1994) suggest a structural model of prejudice and discrimination that can influence alienation. Three interrelated components, campus racial/ethnic climate, prejudiced attitudes held by faculty and staff, and in-class discriminatory experiences have the ability to influence alienation of minority and nonminority students. Within this model university social alienation can occur, for example as students of color eating at separate dining tables, having separate worship services, and the presence of segregated fraternities and other campus social organizations (Romando, 1998). In addition, some institutions may not even have any existing student groups for monoracial-minority or multiracial students. Research has been conducted on the affect of university alienation on students including students of color.
Cooke, Sims, and Peyrefitte (1995) examined university alienation by looking at relationships between graduate student attitudes and attrition. The sampled consisted of 230 graduate students at an urban university in the south. Results indicated that alienation was not strongly correlated with the likelihood of student retention. Possible explanations for this result are that students may remain in a negative situation because of external or internal influences such as family and ego.

Mohr, Eiche, and Sedlack (1998) investigated predictors of college attrition in seniors. They sampled 90 undergraduate students enrolled at a large Eastern public university. This sample consisted of returning and non-returning seniors. Though the sample was diverse, ethnicity and gender results were not reported discussing these variables. Through qualitative analysis of the data, one dimension of school dissatisfaction emerged as institutional alienation. Examples of this dimension are, feeling little concern from teachers and feeling like a number. Results indicated that alienation was significantly correlated with personal contact and guidance.

In a study by Heaven and Bester (1986), alienation and its psychological correlates were examined. The sample included 90 undergraduates at an Australian university and 95 students from a White South African university. Results indicated several correlates within alienation. The researchers found that alienated students tended to be more anxious, have lower self-esteem, and did not feel respected by those in authority. In addition, alienated students reported negative attitudes toward authority. In terms of gender, women had higher levels of alienation than men and alienated students tended to be younger.
A longitudinal study, conducted by Daugherty and Lang (1999) examined social alienation among college students. Eighty-seven undergraduate students were sampled from general psychology courses and differences were examined between eventual graduates and eventual dropouts. Results indicated that women reported significantly lower scores of alienation than men. Finally, social alienation scores were significantly lower among members of Greek organizations than those that were not. This result suggests that alienation is a social factor. In addition, a follow-up study by Daugherty and Lane (1999) conducted on 519 students at an all-male military college suggested that social alienation, at the beginning of a student’s college career, predisposed and predicted attrition.

A study by Tomlinson-Clarke and Clarke (1996) investigated institutional effects on alienation and student effort. Three campuses were sampled and resulted in 300 undergraduate students from a two-year college, comprehensive college, and research institution. Results indicated that alienation differed as a function of institutional setting and gender. Students attending the comprehensive college, and research institutions reported experiencing more meaninglessness, than students enrolled at the two-year college. In addition, students attending the research institution reported higher powerlessness than the other two institutions. This finding suggests, “a direct relationship between the contextual characteristics or institutional size and institutional alienation” (Tomlinson-Clarke & Clarke, 1996, p. 65). Gender variable results indicated that men reported experiencing more alienation than women. Men scored higher on all three subscales of meaninglessness, powerlessness, and social estrangement. Though the
sample was racially diverse (Asian, Black, Latino, Native American, White, and International), no between-group differences were examined.

Previously reported research failed to examine influences of race and ethnicity on alienation. Many factors within the university environment can influence minority students’ alienation levels. One example, described by Moran, Yengo, and Algier (1994), suggests that student organizations can influence levels of self-awareness and/or adjustment to college. A study by Romando (1998) examined the perceived effects of social alienation on Black college students enrolled in a majority-populated university. One hundred African American students were sampled from a southeastern university. Findings indicated that 25% of participants experienced lower self-image and self-concept after attending a majority-populated institution. In addition, results indicated a consensus of strong feelings of alienation, including social isolation, meaninglessness, powerlessness, and disenfranchisement. Regarding depression, a low level of this psychological construct was correlated with a low level of social alienation. Gender results indicated that female students were experiencing less degrees of social alienation than males. This research suggests that African-American students are still experiencing social alienation on predominantly Caucasian-American college campuses (Romando, 1998). Experiences that contributed to feelings of social alienation are, falling into a lower socioeconomic status, having large classes with little personal attention, the absence of the university addressing African American needs, lack of respect from the faculty towards African American students, and administrative control of African American students.
Delphin and Rollock (1995) conducted a study examining university alienation and African American ethnic identity as predictors of knowledge about, attitudes towards, and likely use of psychological services. Researchers sampled 180 African American undergraduate students from a large Midwestern university. Results suggested that African American students who feel more alienated are more likely not to seek out assistance. Though results indicated a preference for the ethnic similarity of helpers, students experiencing higher levels of alienation did not show a high likelihood of using any services. “Highly alienated students may not care to interact with any help source, regardless of ethnicity and despite their favorable attitudes and knowledge about services” (Delphin & Rollock, 1995, p. 344). The researchers concluded that racial identity and university alienation have a direct but independent affect on aspects of students employing psychological services.

Burbach and Thompson (1973) examined alienation among college freshman, specifically comparing Puerto Rican, Black and White students. This study sampled 568 undergraduate students from a large urban Northeastern university. Results indicated that significant differences were found for each racial comparison on at least one scale. Significant differences were found between the Black and White group in powerlessness and normlessness with Black students yielding higher levels. In addition, comparison between Black and Puerto Rican students suggested significant differences in social isolation and general alienation, with Black students reporting higher levels on each dimension. Finally, research indicated that Puerto Ricans reported lower social isolation than White students. Results of this study may be influenced by the university demographics.
A study by Steward, Jackson, and Jackson (1990) examined alienation and interactional styles of African American students in a predominantly White environment. Forty-six African American undergraduate students were selected for this study. Researchers found that African American students experienced higher levels of university alienation when there was a desire to receive affection from Caucasian students. In addition, results indicated that successful African American students would change their interaction styles to accommodate predominantly White or Black campus situations.

Within this literature search it was discovered that most research on university alienation has been conducted on majority and minority single race individuals. There appears to be a void in the literature on quantitatively examining multiracial college students on this variable. Most research suggested that monoracial-minority students experience levels of social and institutional alienation while looking for a place to fit in. In addition, monoracial-minority students that discovered either student groups or were among a similar ethnic population could experience lower levels of alienation. Some multiracial individuals have an invisible status in the college environment due to factors such as low multiracial population, institutional unawareness of their presence, and physical appearance. With the limited literature on alienation of multiracial college students there is a need to yield more research in this area. Though validated at an urban Northeastern university, the scale has been reused with institutions of multiple sizes, 2-year schools, and 4-year schools.

Self-Concept

Self-concept is a multidimensional concept comprised of a variety of perceptions about the self. It can include perceptions such as appearance, social acceptance,
creativity, relationships, intellectual ability, scholastic competence, and general self-worth (Neeman & Harter, 1986). These can be summarized as competencies or abilities and social relationships. As students transition to college, several factors can affect overall initial experience. Two interactional factors at the beginning of college are the quality of individual interactions with other members of the university and the extent to which these interactions meet needs and interests (Boulter, 2002). Since this experience is based on the student’s personal perception, a feeling as if needs and interests are not being met can be related to their overall self-concept. In addition, other factors may influence self-concept and its perceptions. In this section a review of literature with college students’ self-concept will be explored.

Boulter (2002) conducted a study examining self-concept as a predictor of college freshman academic adjustment. A sample of 265 first year students from a small southeastern private liberal arts college was used. Results indicated that male and female students’ self-perception of intellectual ability was a positive influence and predicted adjustment in college. In addition, the perception that instructors care and support them was a positive predictor of academic adjustment. Though this study demonstrates the predictive ability of self-concept dimensions, a large homogenous sample was used (81% Caucasian) and therefore cannot be applied to diverse populations.

In a study by Looby and Gerard (1997) gender was examined as an independent variable of self-concept. They sampled 182 students from two universities, a southeastern U.S. school and one in the Virgin Islands. Research indicated that women, in general, reported a lower sense of ideal-self than men.
Another study examining gender and self-concept (Alfred-Liro & Sigelman, 1998), explored symptoms of depression during the transition of college. In this study, self-concept was defined through dividing this idea into the “real self” and “ideal self.” The “real self” is the idea of what one is and the “ideal self” is a realistic notion of what one would like to be. There may be a discrepancy between the two. This self-concept discrepancy is where, “one stands (real self) in relation to where on would like to be (ideal self)” (Alfeld-Liro & Sigelman, 1998, p. 220). It is thought that this discrepancy can influence negative self-concept. This study analyzed surveys from a sample of 287 students attending a private, urban east coast university. The majority of the participants were Caucasian (73%). Results indicated, that though no sex differences in self-concept were discovered before college, males’ real self-concept became more positive over their transition. In addition, real self-concept scores were negatively correlated with depression in both sexes. Finally, a discrepancy between real and ideal self was positively correlated with depressive symptoms for both sexes during the freshman year.

Woodside, Wong, and Wiest (1999) examined the affects of student-faculty interaction on academic achievement and self-concept. The sample consisted of 106 college students from a mid-sized university in southern California. Though this was a diverse sample (Hispanics, Caucasians, African Americans, Asians, and multiracial), no between-group analysis was conducted regarding race. Regression analysis indicated that student-faculty interactions predicted students’ academic achievement and scholastic self-concept.

Additionally, there have been studies exploring the variable of race and ethnicity with self-concept. Cokely (2002) examined the impact of college racial composition on
African American students’ self-concept. A sample of 396 African American students were surveyed from historically Black colleges and one predominantly White college and university setting (PWCU). Results indicated that grade point average was the best predictor of academic self-concept for students enrolled at the PWCU. The best predictor of academic self-concept at the historically Black colleges was the quality of faculty-student interaction. This was demonstrates thorough positive faculty-student relationships, in addition to higher levels of encouragement to continue to graduate studies. It appears that the intentional environment created by the institution has a grand affect on students’ experiences.

Finally, in a study by House (2000), 2,134-college freshman were surveyed exploring the effect of student involvement on the development of academic self-concept. Results indicated that student involvement was significantly associated with self-concept. Though no racial variables were reported, this study supports the idea that student organizations assist in positive development of self-concept. For students of color, this could be demonstrated through racial and cultural organizations such as a Black or multiracial student association.

Summary

After a review of significant literature related to this study, a few themes emerge. First, the multiracial population, in addition to sharing the issues with monoracial-minorities, has additional challenges when transitioning to college. There has been little research conducted on this population in the college setting and most literature has been produced by qualitative means. Though a qualitative research design fosters important significant information and themes, it can only account for smaller samples. In addition,
after reviewing cultural congruity and university alienation, it can be suggested that these feelings can influence levels of self-concept. Though some literature does examine these issues within a racial variable, no quantitative literature was discovered linking the predictive nature of cultural congruity and university alienation to self-concept in the multiracial college student population.
Chapter 3

METHODOLOGY

The following topics are discussed in this chapter: research design, participants, hypotheses, instruments, variable list, procedures, derivation of hypotheses, limitations, and summary.

Research Design

The research design of this study was ex post facto with research hypotheses and test of alternative hypothesis. An ex post facto study “refers to any nonexperimental research strategy in which subjects are singled out because they have already been exposed to a particular condition or because they exhibit a particular characteristic” (Kirk, 1995, p. 9). This design is appropriate for this research as the researcher can increase the internal validity of the design by eliminating competing hypotheses. Due to the limited research on multiracial college students, this study was focused specifically on this population and did not contain a control group. With no control group, the researcher examined within-group differences opposed to between-group differences.

This study set out to examine the research questions testing the relationship between cultural congruity (cultural fit), university alienation (meaninglessness, powerlessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) upon multiracial students' adjustment to college.

According to Kirk (1995) internal validity “is concerned with correctly concluding that an independent variable is, in fact, responsible for variation in the dependent variable” (p. 16). Some common threats to internal validity are history,
maturation, testing, instrumentation, statistical regression, selection, and mortality. A possible threat of internal validity in this study is the factors of alienation, level of cultural congruity, and self-concept affecting the direction of variable relationships. In addition, selection can be an internal validity threat as there may be several differences among the dependent variable due to location in the United States and identity development. External validity "is concerned with the generalizability of research findings to and across populations of subjects and settings" (Kirk, 1995, p. 17). Some common threats to external validity are interaction of testing and treatment, interaction of setting and treatment, interaction of selection and treatment, and multiple-treatment interference. A possible threat of external validity in this study is environmental influences as participants are completing the survey.

Participants

Seventy-one multiracial college students participated in this research study. Multiracial college students are defined as "people who are of two or more racial heritages" (Root, 1996, p. xi). This includes individuals who identify as multiethnic, mixed heritage, and biracial. The sample of multiracial college students was collected from a national search by contacting multiracial college support groups through the Internet. The sampling procedures included convenience sampling and the snowball method.

General and Specific Research Hypotheses

GRH 1: There is a relationship between cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.
SRH 1.1: Multiracial college students will demonstrate a low level of cultural congruity.

SRH 1.2: Multiracial college students will demonstrate a high level of university alienation (meaninglessness, powerlessness, and social estrangement).

SRH 1.3: Multiracial college students will demonstrate a low level of self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth).

GRH 2: There is a relationship between university alienation (meaninglessness, powerlessness, and social estrangement) and specific psychological constructs among multiracial college students.

SRH 2.1: Multiracial college students will demonstrate a high level of powerlessness over and above meaninglessness and social estrangement.

SRH 2.2: Multiracial college students will demonstrate a high level of meaninglessness over and above powerlessness and social estrangement.

SRH 2.3: Multiracial college students will demonstrate a high level of social estrangement over and above powerlessness and meaninglessness.

GRH 3: There is a relationship between self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) and specific psychological constructs among multiracial college students.

SRH 3.1: Multiracial college students will demonstrate a low level of perceived intellectual ability over and above perceived scholastic competence, perceived social acceptance, appearance, and global self-worth.

SRH 3.2: Multiracial college students will demonstrate a low level of perceived scholastic competence over and above perceived social acceptance, appearance, global self-worth, and perceived intellectual ability.

SRH 3.3: Multiracial college students will demonstrate a low level of perceived social acceptance over and above appearance, global self-worth, perceived intellectual ability, and perceived scholastic competence.

SRH 3.4: Multiracial college students will demonstrate a low level of appearance and over and above global self-worth, perceived intellectual ability, perceived scholastic competence, and perceived social acceptance.
Multiracial college students will demonstrate a low level of global self-worth and over and above perceived intellectual ability, perceived scholastic competence, perceived social acceptance, and appearance.

There is a relationship between cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement), self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth), and specific demographic constructs (sex, parental college experience, older sibling college experience, and pre-college cultural experience) among multiracial college students. (Run 4 times)

Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above parental college experience, older sibling college experience, and pre-college cultural environment among multiracial college students. (Run 10 times)
SRH 4.6: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above older sibling college experience, pre-college cultural environment, and sex among multiracial college students. (Run 10 times)

SRH 4.7: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above pre-college cultural environment, sex, and parental college experience among multiracial college students. (Run 10 times)

SRH 4.8: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above sex, parental college experience, and older sibling college experience among multiracial college students. (Run 10 times)

Instruments

The following instruments were used for the study:

College Minority Student Demographic Data Form

Demographic data were gathered by use of the College Minority Student Demographic Data Form (CMSDDF; Paladino, 2003b), which was developed by the researcher. The CMSDDF asks participants information on the following areas: sex (male or female), school classification (freshman, sophomore, junior, senior, or graduate student), grade point average (GPA), age, residence (residence hall, with family, or not with family: apartment/house), pre-college cultural environment (lived in racially diverse area or did not live in racially diverse area) parents' ethnicities (mother and father), parental college experience (both went to college, neither went to college, only mother...
went to college, or only father went to college), older sibling college experience (yes or no), and institution size (small, medium, or large). (See Appendix A).

**Cultural Congruity Scale**

Cultural congruity was measured using the Cultural Congruity Scale (CCS; Gloria & Robinson Kurpius, 1996), which is based on the Perceived Threat Scale (Ethier & Deaux, 1990). The CCS was developed to assess a student’s perception of cultural fit and environmental values within the college or university context. In addition, “the CCS was designed to assess more affective and belief-based perceptions of university life” (Gloria & Robinson Kurpius, 1996, p. 543). For example, some items were developed to assess the level of one’s changing or hiding racial/ethnic values for acceptance or level of nonacceptance stemming from one’s appearance or language (Gloria & Robinson Kurpius, 1996). Others were developed to assess students’ comfort with sharing their cultural congruity feelings with their family. The CCS includes 13-items that are scored on a 7-point Likert scale ranging from (1) Not at all to (7) A great deal. Eight items on the CCS were written for reverse scoring to minimize the possibility of a response set. These were items 1, 2, 3, 4, 6, 7, 9, and 10. Respondents indicate the amount they have experienced each question’s feeling or situation at their university of college. A total cultural congruity scale is obtained by summing the responses and can range from 13 to 91. Higher scores on the CCS indicate greater perceived cultural fit with the college or university environment and lower scores indicate less perceived cultural fit within the college or university. A literature review and correspondence with the assessment authors revealed no cutoffs for low, medium, and high scores. For the purpose of this study Low
Cultural Congruity is 13-38, Medium Cultural Congruity is 39-65, and High Cultural Congruity is 66-91.

Gloria and Robinson Kurpius (1996) validated the CCS with Chicano/a students and found a resulting internal consistency Cronbach’s alpha of .89. The CCS also registered Cronbach’s alpha with African Americans and American Indian undergraduate students and are .80 and .76, respectively (Gloria & Ho, 2003). Internal consistency reliability was tested using 158 Chicano/a college students and was .82. For 285 Mexican American college students the internal consistency was .80. A combination of samples leads to an internal consistency of .81. Predictive validity of the CCS comes from a regression equation to predict academic performance. Cultural congruity accounted for .11 of the variance in academic persistence $F(1, 433) = 55.55, p < .0001$ and a negative correlation ($r = -.34$) which suggests that higher cultural fit is related to positive persistence decisions (Gloria & Robinson Kurpius, 1996). (See Appendix B).

University Alienation Scale

Alienation was measured using the University Alienation Scale (UAS; Burbach, 1972). The UAS was developed to measure student perception of alienation within the college or university context. “The university, it is argued, it contains the alienating features of the larger society and thus offers an appropriate measurement context” (Burbach, 1972, p. 226). The UAS is a 24-item measure that is scored on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Respondents indicate the amount they agree or disagree with each statement regarding university issues. The UAS contains 3 subscales with randomly assigned positions in the scale: (a) powerlessness (9-items), (b) meaninglessness (8-items), and (c) social estrangement (7-items). The range of the three
combined scores is 1-120 and higher scores on the scale indicate greater feelings of university alienation, while lower scores indicate lower feelings of university alienation. The range of the three separate subscales, meaninglessness, powerlessness, and social estrangement are 8-40, 9-45, and 7-35, respectively. Four items on the UAS were written for reverse scoring to minimize the possibility of a response set. These were items 6, 8, 11, and 21. Only one alteration was made to an item on the University Alienation scale with permission of the author (Hal Burbach). Item nine, which read, “Students are just so many cogs in the machinery at this university” was changed to, “The collective voice of students carries very little weight at this university.” This decision was made collaboratively between the researcher and author to update the language of the item. A literature review and correspondence with the assessment author revealed no cutoffs for low, medium, and high scores. For the purpose of this study Low University Alienation is 7-44, Medium University Alienation is 45-82, and High University Alienation is 83-120; Low Meaninglessness is 8-18, Medium Meaninglessness is 19-29, and High Meaninglessness is 30-40; Low Powerlessness is 9-20, Medium Powerlessness is 21-33, and High Powerlessness is 34-45; and Low Social Estrangement is 7-15, Medium Social Estrangement is 16-26, and High Social Estrangement is 27-35.

Analysis was conducted on a randomly selected research sample of freshman at an urban, northeastern university with an estimated population of 16,000. Split-half reliability coefficients for the powerlessness, meaninglessness, and social estrangement subscales were .79, .89, and .92 respectively. “The correlated reliability for the total scale was .92” (Burbach, 1972, p. 227). Construct validity was constructed through item-to-item correlation between the UAS and the Dean Alienation Scale (Dean, 1961), which
measures alienation in society as a whole. All scale items were found to significantly contribute ($p < .01$) to the measurement of the scale’s general properties (Burbach, 1972). A study conducted by Cooke (1994) was designed to assess the dimensionality, discriminant, and predictive validities of a 15-item version of Burbach’s University Alienation Scale and confirmed the three-factor structure of its scale with an alpha reliability of .83. Since validated, the University Alienation Scale has also been used with different university sizes (See Appendix C).

_Self-Perception Profile for College Students_

Self-concept was measured using the Self-Perception Profile for College Students (SPPCS; Neemann & Harter, 1986). The SPPCS is a multidimensional self-report assessment with subscales that measure college students self-concept. The SPPCS is comprised of 54-items and 13 subscales. For each item, students are asked to first indicate which of two types of students they are most like (e.g., “Some students do very well at their studies” vs. “Other students don’t do very well at their studies”). The student then decides if the chosen statement is “sort of true” or “really true” for him or her. The effectiveness of this question comes from the belief that half of the students in the world (or one’s reference group) view themselves in one way, while the other half view themselves in the opposite manner (Neemann & Harter, 1986).

The SPPCS’s 13 subscales are: (a) perceived creativity, (b) perceived intellectual ability, (c) perceived scholastic competence, (d) perceived job competence, (e) perceived social acceptance, (f) perceived ability to laugh at oneself (humor), (g) perceived athletic competence, (h) appearance, (i) romantic relationships, (j) close relationships, (k) parent relationships, (l) morality, and (m) global self-worth. For every subscale half of the items
were worded with negative statements. Each item is scored from 1 (low self-perception) to 4 (high self-perception). A literature review and correspondence with the assessment authors revealed no cutoffs for low, medium, and high scores. For the purpose of this study Low Global Self-Worth is 6-11, Medium Global Self-Worth is 12-18, and High Global Self-Worth is 19-24; Low Perceived Scholastic Competence is 4-7, Medium Perceived Scholastic Competence is 8-12, and High Perceived Scholastic Competence is 13-16; Low Perceived Social Acceptance is 4-7, Medium Perceived Social Acceptance is 8-12, and High Perceived Social Acceptance is 13-16; Low Appearance is 4-7, Medium Appearance is 8-12, and High Appearance is 13-16; and Low Perceived Intellectual Ability is 4-7, Medium Perceived Intellectual Ability is 8-12, and High Perceived Intellectual Ability is 13-16.

Reliability of the SPPCS was assessed through coefficient alpha and ranges from .76 to .92 with only one subscale not exceeding .80 (job competence). For the purposes of this study the following five subscales with their respective reliability are used: (a) perceived intellectual ability (.86), (b) perceived scholastic competence (.84), (c) perceived social acceptance (.80), (d) appearance (.85), and (e) global self-worth (no reliability reported). (See Appendix D).

Variable List

The following list of variables were used with collecting and analyzing the data in this research study:

*College Minority Student Demographic Data Form*

Sex: Male: 0
Female: 1
School Classification:  
- Freshman: 0
- Sophomore: 1
- Junior: 2
- Senior: 3
- Graduate Student: 4

Grade Point Average (GPA): 0 – 4.0

Age: 18, 19, 20, 21, 21, 23...

Residence:  
- Residence Hall: 0
- With Family: 1
- Not with Family: Apartment/House: 2

Parents Ethnicities:  
- Mother: ____________
- Father: ____________

Parental College Experience:  
- Both went to college: Yes: 1
  No: 0
- Neither went to college: Yes: 1
  No: 0
- One Parent went to college: Yes: 1
  No: 0

Older Sibling College Experience:  
- Yes: 1
- No: 0

Cultural Environment Pre-college:  
- Lived in a racially diverse area: 1
- Did not live in a racially diverse area: 0

Institutional Size
- Small: 0
- Medium: 1
- Large: 2

*Cultural Congruity Scale*

Cultural Fit 13 - 91

*University Alienation Scale*

University Alienation 24 - 120
Meaninglessness 8 - 40
Powerlessness 9 - 45
Social Estrangement 7 - 35

Self-Perception Profile for College Students (Self-concept)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Perceived intellectual ability</td>
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<tr>
<td>Perceived scholastic competence</td>
<td>4 - 16</td>
</tr>
<tr>
<td>Perceived social acceptance</td>
<td>4 - 16</td>
</tr>
<tr>
<td>Appearance</td>
<td>4 - 16</td>
</tr>
<tr>
<td>Global self-worth</td>
<td>6 - 24</td>
</tr>
</tbody>
</table>

Procedures

Sampling Procedures

Convenient and snowball sampling methods were used to collect data. Snowball sampling is when select groups are recruited to participate in the study and they are able to recruit individuals that match the participant selection criteria for this investigation (Root, 2002). In this study multiracial college support groups and their designated contact person were e-mailed or phoned. Through this relationship they were able to pass along a listserv, e-mail addresses, or mailing addresses for distribution of survey instruments. This is a convenient sample as any multiracial college support group that agreed to participate was included. The use of the multiracial college population is rationalized from the researcher’s specific interest in this population. Root (2002) suggests that, “college samples represent a fairly homogenous age and developmental stage that affects identity development on several planes (e.g., race, ethnicity, gender, and sexuality)” (p. 180). This research aims to explore the many dynamics within the college experience.

Participants were identified through an e-mail or letter inviting them to participate in the study. Individuals were also mailed a copy of the assessments to be returned to the researcher. The Cultural Congruity Scale (Gloria & Robinson Kurpius, 1996), University
Alienation Scale (Burbach, 1972), the Self-Perception Profile for College Students (Neemann & Harter, 1986), along with the College Minority Student Demographic Data Form (Paladino, 2003) was used for data collection.

According to Cohen (1988), a small effect size would be \( f^2 = .02 \), a medium effect size would be \( f^2 = .15 \), and a large effect size would be represented as \( f^2 = .35 \).

A traditional alpha value of .05 was set for significance in this study. Power refers to the probability of rejecting a false null hypothesis (Kirk, 1995). The sample size for this study \( (N = 71) \) for General Research Hypothesis 1 (10 independent variables) has ample power at the large effect size \( (P = 91.5) \) but limited power at the medium effect size \( (P = 60) \). The sample size for this study \( (N = 71) \) for General Research Hypothesis 2 and Specific Research Hypotheses 2.1-2.3 has ample power at the large effect size \( (P = 99) \) and sufficient power at the medium effect size \( (P = 83) \). The sample size for this study \( (N = 71) \) for General Research Hypothesis 3 and Specific Research Hypotheses 3.1-3.4 has ample power at the large effect size \( (P = 97) \) and sufficient power medium effect size \( (P = 71.5) \).

Data Collection Procedures

All surveys were sent out and returned to the researcher to analyze and interpret the data. The assessment instruments were administered through mailing out surveys to various multiracial college student groups and individuals. The time schedule for collection was January 2004 through March 2004. Once approval was granted from the Institutional Review Board (Approval # 04189) multiracial undergraduate and graduate college students participated in the study. Multiracial participants were selected through
convenient and snowball sampling from a nationwide pool of multiracial college support groups and listservs.

Research with people of mixed racial heritage presents many significant challenges (Root, 2002). This includes sampling procedures for the multiracial population. One significant problem is discovering individuals that are willing to participate in a study. The census reported a wide spread population of multiracial people in the nation. For an individual to agree to participate in a study, they first have to identify as multiracial (Root, 2002). This brings upon the issues of identity development. Most individuals who identify themselves as multiracial already have a level of attained identity than those who do not. "The conclusions about multiracial identity would be strengthened if participants were included who might not identify themselves in this way [as multiracial]" (Root, 2002, p. 176). By not studying identity as a variable in the present study, this issue was corrected. The researcher chose to explore alienation, cultural congruity, and self-concept as variables that may affect any multiracial college student's experience.

Derivation of General Research Hypotheses and Specific Research Hypotheses

The first research question explores the relationship between the dependent variables among multiracial college students. To explore research question 1, "What is the relationship between cultural congruity, university alienation, and self-concept among multiracial college students" the following (GRH 1) and (SRH 1.1 – 1.3) were tested using Correlational analysis to assess if there is a relationship between cultural congruity and multiracial college students, university alienation and multiracial college students and self-concept and multiracial college students. A correlation is a method of statistical
analysis for measuring the degree of relationship and direction and power between two
variables (Spatz, 1997). “In addition, a coefficient of correlation is a statistical summary
of the degree and direction of relationship or association between two variables” (Glass
& Hopkins, 1996, p. 103). This statistical method provided information for testing the
following general and specific research hypotheses:

GRH 1: There is a relationship between cultural congruity, university alienation
(powerlessness, meaninglessness, and social estrangement), and self-
concept (perceived intellectual ability, perceived scholastic competence,
perceived social acceptance, appearance, and global self-worth) among
multiracial college students.

SRH 1.1: Multiracial college students will demonstrate a low level of cultural
congruity.

SRH 1.2: Multiracial college students will demonstrate a high level of university
alienation (meaninglessness, powerlessness, and social estrangement).

SRH 1.3: Multiracial college students will demonstrate a low level of self-concept
(perceived scholastic competence, perceived intellectual ability, perceived
social acceptance, appearance, and global self-worth).

The second research question explores what psychological constructs predict
university alienation among multiracial college students. To explore research question 2,
“What psychological constructs predict university alienation among multiracial college
students” the following research hypothesis (GRH 2) and specific research hypotheses
(SRH 2.1 – 2.3) were tested through multiple regression. Multiple regression analyses
were used to determine relationships between powerlessness and university alienation,
meaninglessness and university alienation, and social estrangement and university
alienation of multiracial college students. The multiple regression analysis was conducted
with the independent variables (university alienation constructs: powerlessness,
meaninglessness, and social estrangement) to determine the level of relationship and
strongest relationship with the dependent variable, multiracial college students’ adjustment. Multiple regression is a statistical method most commonly used to predict the dependent variable from two or more independent variables (Glass & Hopkins, 1996). This statistical method provided information for testing the following general and specific research hypotheses:

GRH 2: There is a relationship between university alienation (meaninglessness, powerlessness, and social estrangement) and specific psychological constructs among multiracial college students.

SRH 2.1: Multiracial college students will demonstrate a high level of powerlessness over and above meaninglessness and social estrangement.

SRH 2.2: Multiracial college students will demonstrate a high level of meaninglessness over and above powerlessness and social estrangement.

SRH 2.3: Multiracial college students will demonstrate a high level of social estrangement over and above powerlessness and meaninglessness.

The third research question explores what psychological constructs predict self-concept among multiracial college students. To explore research question 3, “What psychological constructs predict self-concept among multiracial college students” the following research hypothesis (GRH 3) and specific research hypotheses (SRH 3.1 – 3.5) were analyzed through the means of multiple regression. The multiple regression analysis was conducted with the independent variables (self-concept: intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) to determine the level of relationship and strongest relationship with the dependent variable, multiracial college students’ adjustment. This statistical method provided information for testing the following general and specific research hypotheses:
GRH 3: There is a relationship between self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) and specific psychological constructs among multiracial college students.

SRH 3.1: Multiracial college students will demonstrate a low level of perceived intellectual ability over and above perceived scholastic competence, perceived social acceptance, appearance, and global self-worth.

SRH 3.2: Multiracial college students will demonstrate a low level of perceived scholastic competence over and above perceived social acceptance, appearance, global self-worth, and perceived intellectual ability.

SRH 3.3: Multiracial college students will demonstrate a low level of perceived social acceptance over and above appearance, global self-worth, perceived intellectual ability, and perceived scholastic competence.

SRH 3.4: Multiracial college students will demonstrate a low level of appearance over and above global self-worth, perceived intellectual ability, perceived scholastic competence, and perceived social acceptance.

SRH 3.5: Multiracial college students will demonstrate a low level of global self-worth over and above perceived intellectual ability, perceived scholastic competence, perceived social acceptance, and appearance.

To explore research question 4, "What is the relationship between cultural congruity, university alienation, self-concept, and specific demographic constructs" the following research hypotheses (GRH 4) and specific research hypotheses (SRH 4.1 – 4.4) were tested through multiple regression analysis. Specific demographics that were examined are sex, parental college experience, older sibling experience, and pre-college cultural experience. In addition, the specific research hypotheses (SRH 4.5 – 4.8) were also tested through multiple regression analysis. This analysis provided information on the differences and strength in levels of specific demographic constructs in relationship to cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement) and self-concept (intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth). Data were analyzed...
through both full and restricted models. A full model will consist of all demographic constructs. The restricted model (using a test statement) involves removing or controlling for one of the demographic constructs creates a restricted model. The result reports a different significance level of $F$ with a demographic construct controlled for. These statistical methods provided information for testing the following general and specific research hypotheses:

**GRH 4:** There is a relationship between cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement), self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth), and specific demographic constructs (sex, parental college experience, older sibling college experience, and pre-college cultural experience) among multiracial college students.

**SRH 4.1:** Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

**SRH 4.2:** Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

**SRH 4.3:** Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

**SRH 4.4:** Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students. (Run 4 times)

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SRH 4.5: Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above parental college experience, older sibling college experience, and pre-college cultural environment among multiracial college students. (Run 10 times)

SRH 4.6: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above older sibling college experience, pre-college cultural environment, and sex among multiracial college students. (Run 10 times)

SRH 4.7: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above pre-college cultural environment, sex, and parental college experience among multiracial college students. (Run 10 times)

SRH 4.8: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above sex, parental college experience, and older sibling college experience among multiracial college students. (Run 10 times)

Since all assessments do not have equal scales, all scores were converted to z-scores through the statistical program, SAS. This will assist in examining all standard deviation units from the mean. To assess Internal-consistency with the assessments Cronbach’s alpha formula was used. In addition, “the use of multiple statistical tests may lead to a situation where the chance of committing at least one Type I error, i.e., a situation in which a true null hypothesis is rejected, significantly increased” (Newman, Fraas, & Laux, 2000, p. 7). To adjust alpha levels in this study, a Bonferroni-type
adjustment was employed through SAS. This adjustment procedure allows researchers greater flexibility. Newman, et al. (2000) suggest that this flexibility works well, “controlling Type I error rates in studies that contain multiple statistical tests of correlation values and regression coefficients” (p. 10).

Limitations

Limitations of the research procedures may relate to sampling procedures. The participants were gathered through convenient and snowball sampling. In addition, there was not a control group used in this study. Another limitation is the environmental conditions when taking the survey. For example, will they be taking the survey inside or outside their multiracial groups? In addition, results gained from multiracial college students in a multiracial social/support group may not apply to those who do not have the same available resources or choose not to use them.

Summary

The procedures for this research study involve the use of the Cultural Congruity Scale (Gloria & Robinson Kurpius, 1996), University Alienation Scale (Burbach, 1972), Self-Perception Profile for College Students (Neemann & Harter, 1986), and the College Minority Student Demographic Data Form (Paladino, 2003b). These assessments were used to explore the main effects of cultural congruity, alienation, specific domains of self-concept with multiracial college students. Results of these measures were then analyzed utilizing a variety of statistical methods.
Chapter Four

RESULTS OF THE STUDY

This chapter contains the results of the study in three major sections: (a) demographic descriptive statistics collected from the multiracial college population sample, (b) results of the four general research hypotheses and their corresponding specific research hypotheses and multiple regression analyses used to test the general research hypotheses and their corresponding specific research hypotheses, and (c) a summary of the findings.

Demographic Descriptive Statistics

All participants \((N = 71)\) in this study were multiracial college students from throughout the nation. Seventy-two percent \((n = 51)\) of the participants were female and 28\% \((n = 20)\) were male. Fifteen percent \((n = 11)\) of the participants reported being in their freshman year, 31\% \((n = 22)\) sophomore year, 20\% \((n = 14)\) junior year, 15\% \((n = 11)\) senior year, and 19\% \((n = 13)\) graduate students. Participants ranged in GPA from 1.90 to 4.00 \((M = 3.30; SD = 0.44)\). Participants ranged in age from 18 to 47 \((M = 21.28; SD = 4.24)\). Fifty-one percent \((n = 36)\) reported living in a residence hall, 7\% \((n = 5)\) with their family, and 42\% \((n = 30)\) not with their family: apartment/house. Sixty-one percent \((n = 43)\) reported that both of their parents went to college, 13\% \((n = 9)\) reported neither went, 26\% \((n = 19)\) only one parent went, 12\% \((n = 8)\) only mother went, and 15\% \((n = 11)\) only father went. Thirty-two percent \((n = 23)\) reported that there was older sibling college experience. Fifty-four percent \((n = 38)\) reported that they lived in a cultural environment pre-college. Thirty-seven percent \((n = 26)\) reported that their institutional
size is small, 20% ($n = 14$) medium, and 43 percent ($n = 31$) large. See Table 4.1 for a summary of the demographic descriptive statistics.

Table 4.1

*Summary of Demographic Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
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<tr>
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<td>15</td>
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<tr>
<td>Sophomore</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>Junior</td>
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<td>20</td>
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<td>Senior</td>
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<td>15</td>
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<td>19</td>
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<td>With Family</td>
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<td>7</td>
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<td>Not with Family: Apartment/House</td>
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<td>42</td>
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<tr>
<td>Both went to college</td>
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<td>61</td>
</tr>
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<td>13</td>
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<tr>
<td>Only mother went to college</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Only father went to college</td>
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<td></td>
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<tr>
<td>Yes</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>68</td>
</tr>
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<td><strong>Cultural Environment Pre-college</strong></td>
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<td></td>
</tr>
<tr>
<td>Lived in a racially diverse area</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>Did not live in a racially diverse area</td>
<td>33</td>
<td>46</td>
</tr>
<tr>
<td><strong>Institutional Size</strong></td>
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<tr>
<td>Small</td>
<td>26</td>
<td>37</td>
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<tr>
<td>Medium</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Large</td>
<td>31</td>
<td>43</td>
</tr>
</tbody>
</table>

Note: $N = 71$; Percentages may not equal 100 due to rounding.
Internal Consistency

See Table 4.2 for internal consistency reliability estimates for the current sample. According to Nunnally (1967) reliabilities of .50 or .60 will suffice in the early stages of research using predictor tests of hypothesized measures of a construct. In addition, Nunnally (1978) stated later that reliabilities of .70 or higher would suffice.

Table 4.2

Summary of Internal Consistency Reliability Results

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Correlation with Total</th>
<th>Alpha</th>
</tr>
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<tbody>
<tr>
<td>Cultural Congruity</td>
<td>.08</td>
<td>.67</td>
</tr>
<tr>
<td>University Alienation</td>
<td>.37</td>
<td>.62</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>.50</td>
<td>.59</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>.23</td>
<td>.64</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>.11</td>
<td>.66</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>.40</td>
<td>.61</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>.31</td>
<td>.63</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>.25</td>
<td>.64</td>
</tr>
<tr>
<td>Appearance</td>
<td>.39</td>
<td>.61</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>.54</td>
<td>.58</td>
</tr>
</tbody>
</table>

Note: \(N = 71\). Alpha = alpha of total when item removed.
Results of Testing the Research Hypotheses

General and specific research hypotheses for research questions 1 through 4 are described in this section.

General Research Hypothesis 1

GRH 1: There is a relationship between cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

Correlational analysis of the dependent variables is presented in the Table 4.3. Correlational analysis resulted in a significant relationship between Cultural Congruity and Social Estrangement, \( r = -.33, p < .01 \), therefore GRH 1 was supported. Correlational analysis resulted in a significant relationship between Cultural Congruity and Perceived Scholastic Acceptance \( r = .33, p < .008 \) therefore GRH 1 was supported. Correlational analysis resulted in a significant relationship between Meaninglessness and Perceived Scholastic Competence \( r = -.38, p < .006 \) therefore GRH 1 was supported. Correlational analysis resulted in a significant relationship between Social Estrangement and Perceived Social Acceptance \( r = -.43, p < .006 \) therefore GRH 1 was supported. No further support for GRH 1 resulted.
Table 4.3

*Correlational Analysis of Cultural Congruity, University Alienation (Meaninglessness, Powerlessness, and Social Estrangement), Self-Concept (Perceived Scholastic Competence, Perceived Intellectual Ability, Perceived Social Acceptance, Appearance, and Global Self-Worth)*

<table>
<thead>
<tr>
<th></th>
<th>CC</th>
<th>M</th>
<th>P</th>
<th>SE</th>
<th>UA</th>
<th>SW</th>
<th>SC</th>
<th>SA</th>
<th>A</th>
<th>IA</th>
</tr>
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<tbody>
<tr>
<td>CC</td>
<td>---</td>
<td>-.25</td>
<td>-.14</td>
<td>-.33*</td>
<td>-.28</td>
<td>.29</td>
<td>.33**</td>
<td>.26</td>
<td>.19</td>
<td>.28</td>
</tr>
<tr>
<td>M</td>
<td>---</td>
<td>.67</td>
<td>.54</td>
<td>.89</td>
<td>-.11</td>
<td>-.38***</td>
<td>-.05</td>
<td>.01</td>
<td>-.25</td>
<td></td>
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<tr>
<td>P</td>
<td>---</td>
<td>.52</td>
<td>.86</td>
<td>.10</td>
<td>.03</td>
<td>-.004</td>
<td>.09</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>---</td>
<td>.75</td>
<td>-.15</td>
<td>-.18</td>
<td>-.43***</td>
<td>-.11</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UA</td>
<td>---</td>
<td>-.07</td>
<td>-.23</td>
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<td>.01</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SW</td>
<td>---</td>
<td>.55</td>
<td>.56</td>
<td>.56</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
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<td>SC</td>
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<td>.32</td>
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<tr>
<td>SA</td>
<td>---</td>
<td>.30</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>---</td>
<td>.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>---</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Bonferroni Adjusted for CC, M, P, SE, UA: *p < .01; Bonferroni Adjusted for CC, SW, SC, SA, A, IA: **p < .008; Bonferroni Adjusted for M, P, SE, UA, SW, SC, SA, A, IA: ***p < .006. CC = Cultural Congruity; M = Meaninglessness; P = Powerlessness; SE = Social Estrangement; UA = University Alienation; SW = Global Self-Worth; SC = Perceived Scholastic Competence; SA = Perceived Social Acceptance; A = Appearance; IA = Perceived Intellectual Ability.

Specific Research Hypotheses 1.1 – 1.3

Data revealed the means and standard deviations for cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement), and self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth. Means and standard deviations for full scale and likert scale are presented in Table 4.4. All scales were broken down into three levels: Low, Medium, and High for hypotheses testing.
SRH 1.1: Multiracial college students will demonstrate a low level of cultural congruity.

Low Cultural Congruity is 13-38, Medium Cultural Congruity is 39-65, and High Cultural Congruity is 66-91. Results indicated multiracial college students reporting a high level of Cultural Congruity ($M = 70.08; SD = 12.61$), therefore this hypothesis was not supported.

SRH 1.2: Multiracial college students will demonstrate a high level of university alienation (meaninglessness, powerlessness, and social estrangement).

Low University Alienation is 7-44, Medium University Alienation is 45-82, and High University Alienation is 83-120. Results indicated multiracial college students reporting a medium level of University Alienation ($M = 60.20; SD = 13.45$), therefore this hypothesis was not supported. Low Meaninglessness is 8-18, Medium Meaninglessness is 19-29, and High Meaninglessness is 30-40. Results indicated multiracial college students reporting a medium level of Meaninglessness ($M = 19.88; SD = 5.42$), therefore this hypothesis was not supported. Low Powerlessness is 9-20, Medium Powerlessness is 21-33, and High Powerlessness is 34-45. Results indicated multiracial college students reporting a medium level of Powerlessness ($M = 22.41; SD = 6.13$), therefore this hypothesis was not supported. Low Social Estrangement is 7-15, Medium Social Estrangement is 16-26, and High Social Estrangement is 27-35. Results indicated multiracial college students reporting a medium level of Social Estrangement ($M = 18.07; SD = 4.36$), therefore this hypothesis was not supported.

SRH 1.3: Multiracial college students will demonstrate a low level of self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth).
Low Global Self-Worth is 6-11, Medium Global Self-Worth is 12-18, and High Global Self-Worth is 19-24. Results indicated multiracial college students reporting a medium level of Global Self-Worth ($M = 18.14; SD = 3.42$), therefore this hypothesis was not supported. Low Perceived Scholastic Competence is 4-7, Medium Perceived Scholastic Competence is 8-12, and High Perceived Scholastic Competence is 13-16. Results indicated multiracial college students reporting a medium level of Perceived Scholastic Competence ($M = 11.24; SD = 2.70$), therefore this hypothesis was not supported. Low Perceived Social Acceptance is 4-7, Medium Perceived Social Acceptance is 8-12, and High Perceived Social Acceptance is 13-16. Results indicated multiracial college students reporting a medium level of Perceived Social Acceptance ($M = 11.61; SD = 2.99$), therefore this hypothesis was not supported. Low Appearance is 4-7, Medium Appearance is 8-12, and High Appearance is 13-16. Results indicated multiracial college students reporting a medium level of Appearance ($M = 10.36; SD = 3.29$), therefore this hypothesis was not supported. Low Perceived Intellectual Ability is 4-7, Medium Perceived Intellectual Ability is 8-12, and High Perceived Intellectual Ability is 13-16. Results indicated multiracial college students reporting a medium level of Perceived Intellectual Ability ($M = 11.94; SD = 2.80$), therefore this hypothesis was not supported.
Table 4.4

Summary of Means (Full Scale and Likert Scale) of Cultural Congruity, University Alienation (Meaninglessness, Powerlessness, and Social Estrangement), Self-Concept (Perceived Scholastic Competence, Perceived Intellectual Ability, Perceived Social Acceptance, Appearance, and Global Self-Worth)

<table>
<thead>
<tr>
<th></th>
<th>Full Scale</th>
<th>Full Scale</th>
<th>Likert Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
<td>( M )</td>
</tr>
<tr>
<td>Cultural Congruity</td>
<td>70.08</td>
<td>12.61</td>
<td>5.39</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>19.89</td>
<td>5.42</td>
<td>2.49</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>22.41</td>
<td>6.13</td>
<td>2.49</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>18.07</td>
<td>4.36</td>
<td>2.58</td>
</tr>
<tr>
<td>University Alienation</td>
<td>60.20</td>
<td>13.45</td>
<td>2.51</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>18.14</td>
<td>3.42</td>
<td>3.02</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>11.24</td>
<td>2.70</td>
<td>2.81</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>11.61</td>
<td>2.99</td>
<td>2.90</td>
</tr>
<tr>
<td>Appearance</td>
<td>10.36</td>
<td>3.29</td>
<td>2.59</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>11.94</td>
<td>2.80</td>
<td>2.99</td>
</tr>
</tbody>
</table>

General Research Hypotheses 2

GRH 2: There is a relationship between university alienation (meaninglessness, powerlessness, and social estrangement) and specific psychological constructs among multiracial college students.

Results of testing general research hypothesis 2 indicated no significant findings in the relationship of University Alienation (Meaninglessness, Powerlessness, and Social
Estrangement) among multiracial college students. therefore this hypothesis was not supported. See table 4.5 for a summary of findings.

Table 4.5

*Summary of Multivariate Regression Analysis for University Alienation (Meaninglessness, Powerlessness, and Social Estrangement)*

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>495.04</td>
<td>165.02</td>
<td>0.38</td>
<td>.76</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>29,325</td>
<td>437.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>29,820</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: $R^2 = .02.*

**Specific Research Hypotheses 2.1 – 2.3**

SRH 2.1: Multiracial college students will demonstrate a high level of powerlessness over and above meaninglessness and social estrangement.

SRH 2.2: Multiracial college students will demonstrate a high level of meaninglessness over and above powerlessness and social estrangement.

SRH 2.3: Multiracial college students will demonstrate a high level of social estrangement over and above powerlessness and meaninglessness.

Results of testing specific research hypotheses 2.1 – 2.3 indicated no significant findings; therefore these hypotheses were not supported. See table 4.6 for a summary of findings.
### Table 4.6

**Summary of Proportion of Variance for University Alienation (Meaninglessness, Powerlessness, and Social Estrangement).**

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaninglessness</td>
<td>.02</td>
<td>0.95</td>
<td>.33</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>.02</td>
<td>0.59</td>
<td>.44</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>.02</td>
<td>0.16</td>
<td>.68</td>
</tr>
</tbody>
</table>

### General Research Hypotheses 3

**GRH 3:** There is a relationship between self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) and specific psychological constructs among multiracial college students.

Results of testing general research hypothesis 3 indicated significant findings with Self-Concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) among multiracial college students $F = 2.47$, $p = .0416$ therefore this hypothesis was supported. See Table 4.7 for a summary.

### Table 4.7

**Summary of Multivariate Regression Analysis for Self-Concept (Perceived Scholastic Competence, Perceived Intellectual Ability, Perceived Social Acceptance, Appearance, and Global Self-Worth)**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>5</td>
<td>4,719.46</td>
<td>943.89</td>
<td>2.47*</td>
</tr>
<tr>
<td>Error</td>
<td>64</td>
<td>24,467</td>
<td>382.29</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>29,186</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *$p < .05$, $R^2 = .16$, $df = (5,64)$.*
Specific Research Hypotheses 3.1 – 3.5

SRH 3.1: Multiracial college students will demonstrate a low level of perceived intellectual ability over and above perceived scholastic competence, perceived social acceptance, appearance, and global self-worth.

SRH 3.2: Multiracial college students will demonstrate a low level of perceived scholastic competence over and above perceived social acceptance, appearance, global self-worth, and perceived intellectual ability.

SRH 3.3: Multiracial college students will demonstrate a low level of perceived social acceptance over and above appearance, global self-worth, perceived intellectual ability, and perceived scholastic competence.

SRH 3.4: Multiracial college students will demonstrate a low level of appearance over and above global self-worth, perceived intellectual ability, perceived scholastic competence, and perceived social acceptance.

SRH 3.5: Multiracial college students will demonstrate a low level of global self-worth over and above perceived intellectual ability, perceived scholastic competence, perceived social acceptance, and appearance.

Results of testing specific research hypotheses 3.1 – 3.5 indicated Global Self-Worth was a significant contributor of variance ($F = 9.39, p = .003$) over and above perceived intellectual ability, perceived scholastic competence, perceived social acceptance, and appearance among multiracial college students therefore hypothesis 3.5 was supported. There were no other significant findings, therefore no other hypotheses were supported. See Table 4.8 for a summary.
Table 4.8

Summary of proportion of variance for perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Intellectual Ability</td>
<td>1.60</td>
<td>.210</td>
</tr>
<tr>
<td>Perceived Scholastic Competence</td>
<td>0.63</td>
<td>.43</td>
</tr>
<tr>
<td>Perceived Social Acceptance</td>
<td>3.52</td>
<td>.065</td>
</tr>
<tr>
<td>Appearance</td>
<td>1.35</td>
<td>.249</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>9.39</td>
<td>.003**</td>
</tr>
</tbody>
</table>

Note: **p < .01, $R^2 = .16$, df = (5,64).

Specific Research Hypotheses 4.1 - 4.4

SRH 4.1: Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

Results of testing specific research hypothesis 4.1 indicated Sex accounted for a significant amount of variance in Global Self-Worth, $F(1,68) = 4.27$, $p < .05$, therefore this hypothesis was partially supported. There were no other significant findings. See Table 4.9 for a summary.
Table 4.9

Summary of Multivariate Regression Analysis for Gender

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>SS</th>
<th>MS</th>
<th>$R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Congruity</td>
<td>18.89</td>
<td>18.89</td>
<td>.00</td>
<td>.12</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>28.81</td>
<td>28.81</td>
<td>.01</td>
<td>.98</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>9.37</td>
<td>9.37</td>
<td>.00</td>
<td>.25</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>43.75</td>
<td>43.75</td>
<td>.03</td>
<td>2.35</td>
</tr>
<tr>
<td>University Alienation</td>
<td>113.61</td>
<td>113.61</td>
<td>.01</td>
<td>.64</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>47.84</td>
<td>47.84</td>
<td>.06</td>
<td>4.27*</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>1.85</td>
<td>1.85</td>
<td>.00</td>
<td>.25</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>27.21</td>
<td>27.21</td>
<td>.04</td>
<td>3.12</td>
</tr>
<tr>
<td>Appearance</td>
<td>13.44</td>
<td>13.44</td>
<td>.02</td>
<td>1.24</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>12.09</td>
<td>12.09</td>
<td>.02</td>
<td>1.55</td>
</tr>
</tbody>
</table>

Note: $df = 1, 68$. * $p < .05$.

SRH 4.2: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

Results of testing specific research hypothesis 4.2 indicated Parental College Experience (Both parents went college) accounted for a significant proportion of variance in Cultural Congruity, $F(1, 68) = 4.29, p < .05$, Meaninglessness, $F(1, 68) = 3.96, p < .05$, University Alienation, $F(1, 68) = 5.21, p < .05$, Global Self-Worth, $F(1, 68) = 6.34, p < .01$, Appearance, $F(1, 68) = 7.76, p < .01$, and Perceived Intellectual Ability, $F(1, 68) =$
5.74, \( p < .05 \), therefore this hypothesis was partially supported. There were no other significant findings. See Table 4.10 for a summary.

Table 4.10

Summary of Multivariate Regression Analysis for Both Parents in College

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>SS</th>
<th>MS</th>
<th>Adjusted ( R^2 )</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Congruity</td>
<td>654.28</td>
<td>654.28</td>
<td>.06</td>
<td>4.29*</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>111.56</td>
<td>111.56</td>
<td>.06</td>
<td>3.96*</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>72.48</td>
<td>72.48</td>
<td>.03</td>
<td>2.00</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>61.74</td>
<td>61.74</td>
<td>.05</td>
<td>3.37</td>
</tr>
<tr>
<td>University Alienation</td>
<td>872.77</td>
<td>872.77</td>
<td>.07</td>
<td>5.21*</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>69.11</td>
<td>69.11</td>
<td>.09</td>
<td>6.34**</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>9.51</td>
<td>9.51</td>
<td>.02</td>
<td>1.31</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>14.65</td>
<td>14.65</td>
<td>.02</td>
<td>1.64</td>
</tr>
<tr>
<td>Appearance</td>
<td>76.60</td>
<td>76.60</td>
<td>.10</td>
<td>7.76*</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>42.20</td>
<td>42.20</td>
<td>.08</td>
<td>5.74*</td>
</tr>
</tbody>
</table>

Note: \( df = 1,68, * p < .05; ** p < .01 \).

SRH 4.3: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

Results of testing specific research hypotheses 4.3 indicated no significant findings therefore this hypothesis was not supported. See table 4.11 for a summary.
Table 4.11

*Summary of Multivariate Regression Analysis for Older Sibling College Experience*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>SS</th>
<th>MS</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Congruity</td>
<td>36.05</td>
<td>36.05</td>
<td>.00</td>
<td>.23</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>21.62</td>
<td>21.62</td>
<td>.01</td>
<td>.73</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>1.78</td>
<td>1.78</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>28.56</td>
<td>28.56</td>
<td>.02</td>
<td>1.52</td>
</tr>
<tr>
<td>University Alienation</td>
<td>1.05</td>
<td>1.05</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>13.22</td>
<td>13.22</td>
<td>.02</td>
<td>1.13</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>10.26</td>
<td>10.26</td>
<td>.02</td>
<td>1.42</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>1.10</td>
<td>1.10</td>
<td>.00</td>
<td>.12</td>
</tr>
<tr>
<td>Appearance</td>
<td>.32</td>
<td>.32</td>
<td>.00</td>
<td>.03</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>1.42</td>
<td>1.42</td>
<td>.00</td>
<td>.18</td>
</tr>
</tbody>
</table>

Note: $df=1,68.$

SRH 4.4: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) among multiracial college students.

Results of testing specific research hypotheses 4.4 indicated no significant findings; therefore this hypothesis was not supported. See table 4.12 for a summary of findings.
Table 4.12

*Summary of Multivariate Regression Analysis for Pre-College Cultural Environment*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>SS</th>
<th>MS</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Congruity</td>
<td>71.79</td>
<td>71.79</td>
<td>.01</td>
<td>.45</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>25.52</td>
<td>25.52</td>
<td>.01</td>
<td>.87</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>32.30</td>
<td>32.30</td>
<td>.01</td>
<td>.88</td>
</tr>
<tr>
<td>Social Estrangement</td>
<td>58.95</td>
<td>58.95</td>
<td>.05</td>
<td>3.21</td>
</tr>
<tr>
<td>University Alienation</td>
<td>300.09</td>
<td>300.09</td>
<td>.03</td>
<td>2.17</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>13.35</td>
<td>13.35</td>
<td>.03</td>
<td>1.85</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>7.40</td>
<td>7.40</td>
<td>.01</td>
<td>.82</td>
</tr>
<tr>
<td>Appearance</td>
<td>9.10</td>
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<td>.01</td>
<td>.36</td>
</tr>
<tr>
<td>Intellectual Ability</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note: $df = 1.68$.

Specific Research Hypotheses 4.5 – 4.8

SRH 4.5: Sex will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above parental college experience, older sibling college experience, and pre-college cultural environment among multiracial college students.

Results of testing specific research hypothesis 4.5 indicated Sex accounted for a significant proportion of variance in Global Self-Worth ($F = 4.10, p = .0470$) over and above Parental College Experience, Older Sibling College Experience, and Pre-college Cultural Environment among multiracial college students, therefore this hypothesis was
partially supported. There were no other significant findings. See Table 4.13 for a summary.

Table 4.13

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>F</th>
<th>p</th>
<th>F-Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>.08</td>
<td>1.40</td>
<td>.22</td>
<td>0.02</td>
</tr>
<tr>
<td>UA</td>
<td>.10</td>
<td>1.81</td>
<td>.13</td>
<td>0.65</td>
</tr>
<tr>
<td>P</td>
<td>.04</td>
<td>0.71</td>
<td>.58</td>
<td>0.27</td>
</tr>
<tr>
<td>M</td>
<td>.08</td>
<td>1.49</td>
<td>.21</td>
<td>1.00</td>
</tr>
<tr>
<td>SE</td>
<td>.14</td>
<td>2.62</td>
<td>.04</td>
<td>2.52</td>
</tr>
<tr>
<td>SW</td>
<td>.15</td>
<td>2.90</td>
<td>.02</td>
<td>4.10*</td>
</tr>
<tr>
<td>SC</td>
<td>.06</td>
<td>1.12</td>
<td>.35</td>
<td>0.35</td>
</tr>
<tr>
<td>SA</td>
<td>.08</td>
<td>1.37</td>
<td>.25</td>
<td>3.16</td>
</tr>
<tr>
<td>A</td>
<td>.12</td>
<td>2.27</td>
<td>.07</td>
<td>1.16</td>
</tr>
<tr>
<td>IA</td>
<td>.10</td>
<td>1.78</td>
<td>.14</td>
<td>1.31</td>
</tr>
</tbody>
</table>

Note: *p < .05; df = (4,65). CC = Cultural Congruity; UA = University Alienation; M = Meaninglessness; P = Powerlessness; SE = Social Estrangement; SW = Global Self-Worth; SC = Perceived Scholastic Competence; SA = Perceived Social Acceptance; A = Appearance; IA = Perceived Intellectual Ability.

SRH 4.6: Parental college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above older sibling college experience, pre-college cultural environment, and sex among multiracial college students.
Results of testing specific research hypothesis 4.6 indicated Parental College Experience (both parents attended college) accounted for a significant proportion of variance in Cultural Congruity ($F = 4.80, p = .0320$), University Alienation ($F = 4.15, p = .0457$), Global Self-Worth ($F = 5.63, p = .0206$), Appearance ($F = 6.61, p = .0124$), and Perceived Intellectual Ability ($F = 5.27, p = .0249$) over and above Older Sibling College Experience, Pre-college Cultural Environment, and Sex among multiracial college students; therefore this hypothesis was partially supported. There were no other significant findings. See Table 4.13 for a summary.

Table 4.14

Summary of Parental College Experience over and above Older Sibling College Experience, Pre-college Cultural Environment, and Sex among multiracial college students Cultural Congruity, University Alienation, Self-Concept.

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
<th>$F$</th>
<th>$P$</th>
<th>$F$-Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>.08</td>
<td>1.40</td>
<td>.24</td>
<td>4.80*</td>
</tr>
<tr>
<td>UA</td>
<td>.10</td>
<td>1.81</td>
<td>.13</td>
<td>4.15*</td>
</tr>
<tr>
<td>P</td>
<td>.04</td>
<td>0.71</td>
<td>.58</td>
<td>1.75</td>
</tr>
<tr>
<td>M</td>
<td>.08</td>
<td>1.49</td>
<td>.21</td>
<td>3.02</td>
</tr>
<tr>
<td>SE</td>
<td>.14</td>
<td>2.62</td>
<td>.04</td>
<td>2.72</td>
</tr>
<tr>
<td>SW</td>
<td>.15</td>
<td>2.90</td>
<td>.02</td>
<td>5.63*</td>
</tr>
<tr>
<td>SC</td>
<td>.06</td>
<td>1.12</td>
<td>.35</td>
<td>0.71</td>
</tr>
<tr>
<td>SA</td>
<td>.08</td>
<td>1.37</td>
<td>.25</td>
<td>1.08</td>
</tr>
<tr>
<td>A</td>
<td>.12</td>
<td>2.27</td>
<td>.07</td>
<td>6.61*</td>
</tr>
<tr>
<td>IA</td>
<td>.10</td>
<td>1.78</td>
<td>.14</td>
<td>5.27</td>
</tr>
</tbody>
</table>

Note: *$p < .05$; **$p < .01$; $df = (4,65)$. CC = Cultural Congruity; UA = University Alienation; M = Meaninglessness; P = Powerlessness; SE = Social Estrangement; SW =
SRH 4.7: Older sibling college experience will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above pre-college cultural environment, sex, and parental college experience among multiracial college students.

Results of testing specific research hypotheses 4.7 indicated no significant findings; therefore this hypothesis was not supported. See table 4.14 for a summary.

Table 4.15

Summary of Older Sibling College Experience over and above Parental College Experience, Pre-college Cultural Environment, and Sex among multiracial college students Cultural Congruity, University Alienation, Self-Concept.

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<tr>
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<th>$R^2$</th>
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<td>UA</td>
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Note: CC = Cultural Congruity; UA = University Alienation; M = Meaninglessness; P = Powerlessness; SE = Social Estrangement; SW = Global Self-Worth; SC = Perceived...
Scholastic Competence; SA = Perceived Social Acceptance; A = Appearance; IA = Perceived Intellectual Ability.

SRH 4.8: Pre-college cultural environment will account for a significant proportion of variance in cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) over and above sex, parental college experience, and older sibling college experience among multiracial college students.

Results of testing specific research hypotheses 4.8 indicated no significant findings; therefore this hypothesis was not supported. See table 4.15 for a summary.

Table 4.16

Summary of Pre-college Cultural Environment over and above Parental College Experience, Older Sibling College Experience, and Sex among multiracial college students Cultural Congruity, University Alienation, Self-Concept.

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<tr>
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<th>$R^2$ Full</th>
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<td>IA</td>
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</table>

Note: CC = Cultural Congruity; UA = University Alienation; M = Meaninglessness; P = Powerlessness; SE = Social Estrangement; SW = Global Self-Worth; SC = Perceived
Scholastic Competence; SA = Perceived Social Acceptance; A = Appearance; IA = Perceived Intellectual Ability.

Summary

This chapter presented analysis of data along with demographic descriptive statistics collected from the multiracial college population sample. A correlational analysis was conducted to determine the relationship between scales and the means and standard deviations of scales for multiracial college students. In addition, several multivariate regression analyses (presented as univariate) were conducted on multiple dependent variables to examine the proportion of variance of scale variables and demographic variables. Several significant relationships resulted, supporting some of the hypotheses. A discussion of these results and implications of this investigation follow in the next chapter.
CHAPTER 5

DISCUSSION

This chapter provides a discussion of the study and includes an discussion of the results, followed by counseling and higher education implications, limitations of the study, recommendations for further research, and conclusions. The purpose of this study was to examine key factors that relate to the self-perception of cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) in multiracial college students. One goal of this study was to discover if there is a relationship between cultural congruity, alienation, and self-concept among multiracial college students. In addition, this study examined what factors predict cultural congruity, university alienation, and self-concept in multiracial college students. Finally, this study explored the relationship of cultural congruity, university alienation, self-concept, and specific demographic constructs with multiracial college students.

General Research Hypothesis 1 was tested through correlational analysis and resulted in a significant negative relationship between Cultural Congruity and Social Estrangement. This finding suggests that multiracial college students who reported higher levels of cultural fit in the university environment were more likely to report lower levels of social estrangement or loneliness at their institution. Blockus (2002) examined the influences and experiences of African American undergraduate science majors at predominantly White universities. The results suggest a positive correlation between cultural congruity and influence of peers. This finding tends to support the current study.

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With influence and support from peers during the college experience there will be less room for the individual to experience loneliness. In addition, Gloria (1993) reported that higher cultural congruity was positively correlated with higher social support from family and friends and individuals who reported higher levels of cultural fit also reported a perception of a more supportive environment.

Correlational analysis resulted in a significant positive relationship between Cultural Congruity and Perceived Scholastic Acceptance. This finding suggests that multiracial college students who reported higher levels of cultural fit in the university environment were more likely to report higher levels personal competence with mastering coursework. Gloria (1993) reported one finding that appears to support this correlation. She discovered that individuals who reported higher levels of cultural congruity and fit were more likely to report less academic stress. Academic stress itself appears to negatively affect personal competence with coursework. In addition, Gloria, Robinson Kurpius, Hamilton, and Wilson (1999) found that African American students that found greater cultural fit within their institution were more likely to persist in college and have higher Educational Degree Self-Efficacy (confidence to complete degree requirements). When looking at other minority groups, similar results emerge. Gloria and Robinson Kurpius (1996) found that Latino/a students that perceived greater cultural fit with their institution also reported greater academic persistence. Gloria and Ho (2003) found with Asian American college students that there was a positive correlation between higher levels of Cultural Congruity and Educational Degree Self Efficacy and Cultural Congruity and Persistence.
Correlational analysis resulted in a significant negative relationship between Meaninglessness and Perceived Scholastic Competence. This finding suggests that multiracial college students who reported lower levels of feeling purposeless and less conflict of norms with their institution were more likely to report higher levels of personal competence with mastering coursework. No research was discovered supporting or disagreeing with this finding. However, this is an important finding as the institution itself has a direct influence on the students’ scholastic confidence. Nishimura (1998) reported that multiracial college students did not want to isolate themselves or feel isolated from their institution and have discovered several challenges. It is difficult for them to do well in other areas if they feel as if they do not belong.

Correlational analysis resulted in a significant negative relationship between Social Estrangement and Perceived Social Acceptance. This finding suggests that multiracial college students who reported lower levels of feeling estranged and lonely from their institution were more likely to report higher levels of personal satisfaction with ones’ social skills. This significance was expected, as the scales are related. One can assume that if students are comfortable with developing relationships and their social skills they will most likely use these skills and feel less socially alienated from their institution. Renn (2000) found that there are different levels of multiracial college students finding space, as many social and public borders were difficult to cross due to their ethnicity. The more permeable social boarders feel to multiracial college students the more likely they will become involved and part of the institution.
From testing Specific Research Hypotheses 1.1 – 1.2, data revealed the means and standard deviations for cultural congruity, university alienation (meaninglessness, powerlessness, and social estrangement), and self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth. With no between group analysis, data was examined through its overall mean score for individual scales and compared to past literature using the scales with different population samples. In addition, this method of comparison was used as no past research comparing multiracial college students to any other monoracial-minority or majority college population is published in the professional literature. This discussion is applied to show a basic comparison to stimulate future between-group research with multiracial college students.

All scales were broken down into three levels: Low, Medium, and High. It is important to be cognizant that all participating multiracial college students belonged to a multiracial support group and this may add to more positive cultural congruity, less alienation, and higher self-concept than those that do either not participate in groups or institution does not offer one. Many studies reporting means of other minorities are from students sampled from classrooms and not cultural/ethnic group organizations. With this prior information, it can be argued (with further research), that the difference in means of multiracial college students and monoracial-minority college students may be larger when looking at multiracial college students not participating in cultural group organizations. In all, multiracial college students reported similar or more negative scores on all scales. This suggests that multiracial college students experience at least similar experiences that monoracial-minority college students face (either negative or positive).
This study and past study means was presented in both full scale and likert scale means respectively.

Low Cultural Congruity is 13-38, Medium Cultural Congruity is 39-65, and High Cultural Congruity is 66-91. Cultural Congruity ($M = 70.08$) and ($M = 5.39$) is rated at the High level. The Cultural Congruity Scale is on a 7-point likert scale with 1 suggesting low cultural congruity and fit and 7 suggesting high cultural congruity and fit, with 4 being the middle. When comparing the multiracial college student means with other minority populations they reported less cultural congruity than Chicanos/as, Latinos/as and African Americans. The following studies support this data: Gloria and Robinson Kurpius (1996) in their validation of the Cultural Congruity Scale with Chicano/a students reported means were 71.88 and 5.52, Robinson, Wilton, and Caldwell (2002) conducted a study looking at Black and Latino college students and reported means of 76.79 and 5.91, Gloria, Robinson Kurpius, Hamilton, and Willson (1999) reported means were 72.41 and 5.57 for African American Students’ at a large predominantly White Southwestern state university, and Blockus (2000) reported means of 72.76 and 5.60 when examining the influences and experiences of Black undergraduate science majors at predominantly White universities.

Multiracial college students also reported more cultural congruity than American Indian and Asian populations. The following studies presented this past data: Gloria and Robinson Kurpius (2001) reported means of 67.86 and 5.22 for American Indians at a large predominantly White southwestern university recruited through classes, Gloria and Ho (2003) examined Cultural Congruity with Asian American college students and discovered means of 66.82 and 5.14. When compared to Caucasian populations,
minorities reported less cultural congruity. In a study by Gloria, Hird, and Navarro (2001), Whites reported the highest level of cultural congruity compared to racial minorities on campus (includes multiracial individuals). Since the cultural congruity means of minority college students are less than some other minorities, it can be assumed that they will also perceive less cultural congruity than White students as shown in previous comparisons between monoracial-minority and Caucasian college students.

Finally, Constantine and Watt (2002) looked at differences in Cultural Congruity of African American women at historically Black and predominantly White institutions. They found that African Americans at historically Black institutions reported higher cultural congruity (74.41 and 5.72 versus 57.08 and 4.39). This suggests that individuals who have ethnic support feel more cultural fit in their institution. Not many institutions have multiracial support groups and this is a factor when looking at their level of cultural congruity.

Low University Alienation is 7-44, Medium University Alienation is 45-82, and High University Alienation is 83-120. University Alienation ($M = 60.20$ and $M = 2.51$) is rated at the Medium level. The University Alienation Scale is on a 5-point Likert scale with 1 suggesting low alienation and 5 suggesting high alienation, with 3 being the middle. When comparing multiracial college student means with other minority populations they reported lower perceived alienation than African Americans and Latinos. The following studies support this data: Steward, Jackson and Jackson (1990) examined African American students’ level of overall University Alienation and reported means of 65.39 and 2.72, Caldwell (1998) examined cultural perceptions of Black students and reported University Alienation means of 65.69 and 2.74, Delphin and
Rollock (1995) examined University Alienation levels with African American college students and reported means of 76.12 and 3.17, Tomlinson-Clarke and Clarke (1996) examined college students at three different campuses and found an overall University Alienation mean of 67.58 and 2.82, and Gordan (1998) examined minority students’ perception of University Alienation and reported means for African American (58.52 and 2.44) and Hispanic (66.96 and 2.79).

Burbach and Thompson (1971) found that minorities reported a higher level of alienation than White college students. Cooke, Sims, and Peyrefitte (2001) on a different scale than the UAS found minority students experiencing higher levels of alienation than White students.

Low Meaninglessness is 8-18, Medium Meaninglessness is 19-29, and High Meaninglessness is 30-40. Meaninglessness \( (M = 19.88) \) and \( (M = 2.49) \) is rated at the Medium Level. The Meaninglessness Scale is on a 5-point likert scale with 1 suggesting low meaninglessness and 5 suggesting high meaninglessness, with 3 being the midpoint.

When comparing means of multiracial college students to other populations we find the following. Tomlinson-Clarke and Clarke (1996) examined college students at three different campuses and found an overall Meaninglessness mean of 21.45 and 2.68. There were no between group analyses done in reference to minority groups. Gordan (1998) examined minority students’ perceptions of Meaninglessness and reported means for African American (18.40 and 2.30) and Hispanic (21.36 and 2.67)

Low Powerlessness is 9-20, Medium Powerlessness is 21-33, and High Powerlessness is 34-45. Powerlessness \( (M = 22.41) \) and \( (M = 2.49) \) is rated at the Medium level. The Powerlessness Scale is on a 5-point likert scale with 1 suggesting low
powerlessness and 5 suggesting high powerlessness, with 3 being the midpoint. Burbach and Thompson (1971) found that minorities reported a higher level of Powerlessness than White college students. Tomlinson-Clarke and Clarke (1996) examined college students at three different campuses and found an overall Powerlessness mean of 26.36 and 2.93. There were no between group analyses done in reference to minority groups. Gordan (1998) examined minority students' perception of Powerlessness and reported means for African American (22.95 and 2.55) and Hispanic (25.29 and 2.81).

Low Social Estrangement is 7-15, Medium Social Estrangement is 16-26, and High Social Estrangement is 27-35. Social Estrangement ($M = 18.07$) and ($M = 2.58$) is rated at the Medium level. The Social Estrangement Scale is on a 5-point likert scale with 1 suggesting low social estrangement and 5 suggesting high social estrangement, with 3 being the middle. Burbach and Thompson (1971) found that minorities reported a higher level of Social Isolation than White college students. Tomlinson-Clarke and Clarke (1996) examined college students at three different campuses and found an overall Social Estrangement mean of 19.77 and 2.82. There were no between group analyses done in reference to minority groups. Gordan (1998) examined minority students' perceptions of Social Estrangement and reported means for African American (17.22 and 2.46) and Hispanic (20.37 and 2.91).

Low Global Self-Worth is 6-11, Medium Global Self-Worth is 12-18, and High Global Self-Worth is 19-24. Global Self-Worth ($M = 18.14$) and ($M = 3.02$) is rated at the high level. Neemann and Harter (1986) reported means to be 19.14 and 3.19 in a 93% White sample.
Low Perceived Scholastic Competence is 4-7, Medium Perceived Scholastic Competence is 8-12, and High Perceived Scholastic Competence is 13-16. Perceived Scholastic Competence ($M = 11.24$) and ($M = 2.81$) is rated at the Medium level. Neemann and Harter (1986) reported means to be 11.28 and 2.82 in a 93% White sample.

Low Perceived Social Acceptance is 4-7, Medium Perceived Social Acceptance is 8-12, and High Perceived Social Acceptance is 13-16. Perceived Social Acceptance ($M = 11.61$) and ($M = 2.90$) is rated at the Medium level. Neemann and Harter (1986) study with 93% of the sample is White found means to be 12.68 and 3.17.

Low Appearance is 4-7, Medium Appearance is 8-12, and High Appearance is 13-16. Appearance ($M = 10.36$) and ($M = 2.59$) is rated at the Medium level. Neemann and Harter (1986) study with 93% of the sample is White found means to be 10.56 and 2.64.

Low Perceived Intellectual Ability is 4-7, Medium Perceived Intellectual Ability is 8-12, and High Perceived Intellectual Ability is 13-16. Perceived Intellectual Ability ($M = 11.94$) and ($M = 2.99$) is rated at the Medium level. Neemann and Harter (1986) study with 93% of the sample is White found means to be 12.32 and 3.08.

General Research Hypothesis 3 was tested through multivariate regression analysis. Results suggested that there is a positive relationship between self-concept (perceived scholastic competence, perceived intellectual ability, perceived social acceptance, appearance, and global self-worth) overall with multiracial college students. The proportion of variance (coefficient of determination) accounted for ($R^2 = .16$) indicates 16 percent of multiracial college student adjustment is associated (common variance) with their level of self-concept. Though past literature does not specifically support this finding, qualitative research with multiracial college students have discussed
these themes as salient issues. For example, Gasser (2002) reported that multiracial college students described the following themes influenced their adjustment to college: appearance, social acceptance, academic needs were not met by the university, and personal identity level). This finding further supports the qualitative findings at a national quantifiable level.

Specific Research Hypothesis 3 was tested through multivariate regression analysis. Results suggest that Global Self-Worth was a significant contributor to multiracial college student adjustment more than other individual self-concept variables. The proportion of variance (coefficient of determination) accounted for ($R^2 = .16$) indicates 16 percent of multiracial college student adjustment is associated (common variance) with their level of self-concept over and above other individual self-concept variables. Global self-worth refers to, “one’s general feeling about the self, assessed with items such as liking the kind of person one is, and liking the way one is leading one’s life” (Neeman & Harter, 1986, p.3). Root (1994) suggests that one major theme multiracial individuals experience is feeling unique from others. This perception can affect the level of self-esteem (another major theme) and eventually alter the way one leads their life through behavior and personality change to adjust to other racial groups. This finding further supports the prominent general themes that Root discussed. Root suggests that these two themes interface with many of the other issues multiracial individuals experience, which supports the significance of this finding at a national and quantitative level.

Specific Research Hypothesis 4.1 was tested through multivariate regression analysis. Sex accounted for a significant amount of variance in Global Self-Worth. The
proportion of variance (coefficient of determination) accounted for \((R^2 = .16)\) indicates that within multiracial college student adjustment 16 percent of common variance contains the association of gender and global self-worth. Past qualitative research and multiracial themes discuss the issue of gender with the multiracial population and multiracial college population. Root (1994) suggests that gender is an issue as women have significant issues with physical appearance and sexuality. These two themes contribute to one’s self-worth as it may cause the individual to change their sexual behavior or appearance to feel accepted by other minority or majority populations. This becomes a deeper issue as individuals enter a college campus, which is social in nature. Gillem, Cohn, and Throne (2001) reported that appearance and dating was an issue for multiracial college students. Not feeling accepted in either of these arenas can affect self-worth.

Specific Research Hypotheses 4.2 was tested through multivariate regression analysis. Results suggested that having both parents attended college accounted for a significant amount of variance in Cultural Congruity, Meaninglessness, University Alienation, Global Self-Worth, Appearance, and Perceived Intellectual Ability. The proportion of variance (coefficient of determination) accounted for indicates that within multiracial college student adjustment there are common variances associated with the following variables for both parents having attended college. They are as follows: Cultural Congruity \((R^2 = .06)\), Meaninglessness \((R^2 = .06)\), University Alienation \((R^2 = .07)\), Global Self-Worth \((R^2 = .09)\), Appearance \((R^2 = .10)\), and Perceived Intellectual Ability \((R^2 = .08)\). There has been no literature specifically discussing the implications of this significance with multiracial college students. With multiracial college students...
reporting a lack of multiracial representation in academics, departments, and population (Gasser, 2002; Root, 1990), difficulty with empathy and love regarding identity (Nishimura, 1998), fear of dishonoring their parents by choosing specific identities over another, having support and parental college experience plays a key role. For example, when students experience higher family support they tend to experience higher levels of cultural congruity and academic persistence (Gloria & Ho, 2003). A study by Phinney and Haas (2003) further support the implications of this result.

Phinney and Haas (2003) suggest that ethnic minority college students that represent the first generation in their family to attend college face a number of stressors over and above those identified for college students. In their study on ethnic first generation students, they found that students reported coping as significantly less successful in situations where understanding and emotional support were required. In addition, they suggest that students who are the first generation college students may also face a lack of support from family members who have not experienced and so do not understand the problems they experience. A study by Pascarella, Pierson, Wolniak, and Terenzini (2004) partially supports the significance of Intellectual Ability. They discovered that first-generation students made significantly smaller increases in the highest degree they planned to obtain. This is an important issue as it is layered on top of being an ethnic minority.

It is important to note that the statistical significance of the variable Appearance. There is no specific rationalization or direct support for this variable’s significance, however it is important to point out that Appearance is a significant issue for multiracial individuals and multiracial college students. It is possible that without support from
parental college experience, the multiracial college student experiences other factors increasingly. Therefore if Appearance is an issue for the student it would be magnified.

Specific Research Hypothesis 4.5 was tested through multivariate regression analysis by controlling for the sex variable. Sex accounted for a significant amount of variance in Global Self-Worth over and above Parental College Experience, Older Sibling College Experience, and Pre-college Cultural Experience among multiracial college students. This result shows that gender has the strongest influence on multiracial college student adjustment when controlled for and thus, should be further studied. Support for this result is similar to that of Specific Research Hypothesis 4.1. Past qualitative research and multiracial themes discuss the issue of gender with the multiracial population and multiracial college population. In addition to the past discussion, when examining the ecological identity contributors to multiracial college student identity, gender is a main lens (Root, 1999).

Specific Research Hypotheses 4.6 was tested through multivariate regression analysis by controlling for parental college experience. Results suggested that having both parents attended college accounted for a significant amount of variance in Cultural Congruity, University Alienation, Global Self-Worth, and Appearance over and above Older Sibling College Experience, Pre-college Cultural Environment, and Sex among multiracial college students. This result shows that Parental College Experience has the strongest influence on multiracial college student adjustment when controlled for and should be further studied. Support for this finding is similar to Specific Research Hypothesis 4.2. There has been no past literature specifically discussing the implications of this significance with multiracial college students. Further support is viewed through a
study by Hertel (2002), where he reported that first generation students reported less
social adjustment than second-generation students. Less social adjustment can be a result
of experiencing lower cultural congruity and higher university alienation. Finally, first
generation students may experience lower levels of growth in the cognitive, psychosocial,
and statutes attainment-oriented outcomes of college (Pascarella, Pierson, Wolniak, &
Terenzini, 2004). In a study by Pascarella, Pierson, Wolniak, and Terenzini (2004),
results suggested that first-generation students were less likely to live on campus and had
lower levels of extracurricular activities that non-first-generation students. These findings
can influence levels of cultural fit and alienation as they these individuals tend to be
socially and by proximity further from campus activities.

Counseling and Higher Education Implications

Results of this study are important to increase the awareness of needs of
multiracial college students and for use in application with counseling and student affairs
professionals. Resulting means of the main variables regarding cultural fit, university
alienation, and self-concept demonstrate that multiracial individuals encounter similar
experiences as monoracial-minority college students. This result validates the need for
more support from the university or college. Counselors are encouraged to address or add
these variables into their initial and continuing assessment of multiracial clients, in
addition to, acknowledging that these may affect their college experience. The very
nature of this acknowledgement may reduce the initial feeling of alienation.

The concept of global self worth was significant in several areas of this study.
Since this is also a significant theme in multiracial individuals identity and overall life
experience, it should be attended to and assessed. This can be done through several
counseling strategies in individual or group counseling. Journaling and storytelling can be used to either bring awareness of self-worth in individual counseling or assist in reducing alienation and increasing cultural fit in group counseling. It is important to assess whether the multiracial college student’s global self-worth derives from an internal or external sense. Group counseling can also allow multiracial college students to discuss issues that they face on campus or in their young adult years, such as academics alienation, and appearance.

In order to assist with levels of cultural fit and university alienation, both counseling centers and institutions, as a whole, are encouraged to add the selection “multiracial” to their demographic sheets allowing space for them to list their individual racial or cultural identities. This will in turn begin creating space on campus for these students, in addition to creating a record of them to assist with outreach.

Outreach strategies can be developed and can occur either through counseling centers or other entities on campus. One example is forming a multiracial social group. Such a group can create a space for multiracial individuals to not feel alienated from other Monoracial-minority groups and not feel like a chameleon navigating through different racial groups. This allows them a place to feel accepted which can in turn reduce alienation and social estrangement as well as increase self-concept and perception of cultural fit. A multiracial student group has the potential to acknowledge, in a positive manner, the diversity that exists not only on college and university campuses, but also in society (Nishimura, 1998).

Since parental college experience was a continually appearing factor in this study, it would be important to reach out and provide assistance and support for multiracial
college students that may be first generation ethnic students. Having programs through student affairs that focus on academic persistence and student retention is important. Since being multiracial has an initial effect on some areas of college adjustment, adding the factor of first-generation status can further amplify any potential negative social or academic experiences on campus.

Finally, counselor training is a vital component for working with multiracial college students as this population is rapidly increasing. Counseling centers are encouraged to initialize multicultural workshops and training for counselors and student affairs professionals. Training can address main themes and the complex nature of multiracial identity development from this study as well as past studies on multiracial college students. For example, training sessions can include guest lecturers from multiracial backgrounds or experts in the area of multiracial concerns.

Limitations

Although several advantages exist in this study, limitations also exist. First, this sample was retrieved from almost all multiracial college groups around the nation. Since, student involvement is significantly related to self-concept (House, 2000), the multiracial groups may already have the built in social factor and acceptance. In addition, organizational involvement meant lower levels of university alienation for African American college students (Caldwell, 1998), and may have had the same result here. Second, only multiracial individuals were sampled for this study, which allowed only within-groups analysis. Finally, since convenient and snowball sampling was employed, the sample was limited to multiracial college groups that either had a website or listed their contact information under other general multiracial websites.
Further Research Suggestions

The findings from this ground base study illustrate the within-group differences of multiracial college students. There are several ways to build upon this research. First, research can include qualitative sections to design a mixed study that further add to the breadth of the results. Second, studies can specifically explore types of institutions (2-year, research institution, comprehensive college, size, Historically Black Colleges and Universities vs. predominantly Caucasian). Third, researchers can add additional variables, such as faculty relationship. Finally, rerunning this study with additional sample populations to create a between-group study (i.e. add African Americans, Latinos, Asians, Caucasians) will increase the scope of population comparison.

Conclusions

The purpose of this study was to examine key factors that relate to the self-perception of cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) in multiracial college students. One goal of this study was to discover if there is a relationship between cultural congruity, alienation, and self-concept among multiracial college students. In addition, this study examined what factors predict cultural congruity, university alienation, and self-concept in multiracial college students. Finally, this study explored the relationship of cultural congruity, university alienation, self-concept, and specific demographic constructs with multiracial college students.

Significant relationships between cultural fit and social estrangement and scholastic competence with cultural fit and meaninglessness were discovered. These
findings further introduce additional issues that can affect the college adjustment of multiracial students. In addition, gender, self-worth, and first generation college student status were factors that influence college adjustment for multiracial students. These findings add to the limited knowledge and literature of main themes and identity issues multiracial college students face today.

Because of the limited information on multiracial college students and the consistently increasing population, it is important for counseling and student affairs professionals to not only acknowledge these students' presence on campus, and provide space for them within the institutional environment. It is their role to create an intentional environment that fosters and allows for stronger cultural congruity, lower alienation and social estrangement, and increased self-concept. The results of this study are expected to assist counselors, other mental health professionals, and student affairs practitioners on campus better serve, attend to, and focus on the potential issues of the growing multiracial college student population. With their assistance, multiracial college students can obtain positive and successful experiences as they persist through college.
References


Lee-St. John, T. J. (2000). It may be tough, but a multiracial identity is not a crisis. Black Issues in Higher Education, 16(25), 40-41.


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College Minority Student Demographic Data Form

Sex:
Male_______ Female_______

School Classification:
Freshman_______
Sophomore_______
Junior_______
Senior_______
Graduate_______

Grade Point Average (GPA): _______

Age: _______

Residence:
Residence Hall_______
With Family_______
Not With Family: Apartment/House_______

Parental Ethnicities:
Mother: _________________
Father: _________________

Parental College Experience
Both went to college_______
Neither went to college_______
Only mother went to college_______
Only father went to college_______

Older Sibling College Experience
Yes_______
No_______

Pre-college Cultural Environment:
Lived in a racially diverse area_______
Did not live in a racially diverse area_______

Institutional Size
Small_______
Medium_______
Large_______

E-mail Address (solely for use in gift certificate drawing)_________________________

Derrick A. Paladino (2003) ©

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Cultural Congruity Scale

For each of the following items, indicate the extent to which you have experienced the feeling or situation at school. Use the following ratings:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

1. I feel that I have to change myself to fit in at school.
2. I try not to show the parts of me that are “ethnically” based.
3. I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school.
4. I feel that my ethnicity is incompatible with other students.
5. I can talk to my friends at school about my family and culture.
6. I feel I am leaving my family values behind by going to college.
7. My ethnic values are in conflict with what is expected at school.
8. I can talk to my family about my friends from school.
9. I feel that my language and/or appearance make it hard for me to fit in with other students.
10. My family and school values often conflict.
11. I feel accepted at school as an ethnic minority.
12. As an ethnic minority, I feel as if I belong on this campus.
13. I can talk to my family about my struggles and concerns at school.

APPENDIX C
UNIVERSITY ALIENATION SCALE

Below are some statements regarding university issues with which you may agree or disagree. Please register your feelings regarding these statements, i.e., whether you agree or disagree with the statements as they stand. Please complete every item.

Please check in the appropriate blank as follows:

______ SA (STRONGLY AGREE)
______ A (AGREE)
______ U (UNCERTAIN)
______ D (DISAGREE)
______SD (STRONGLY DISAGREE)

1. The size and complexity of this university make it very difficult for a student to know where to turn. (m)
   ______ SA (5)
   ______ A (4)
   ______ U (3)
   ______ D (2)
   ______SD (1)

2. It is only wishful thinking to believe that one can really influence what happens at this university. (p)
   ______ SA (5)
   ______ A (4)
   ______ U (3)
   ______ D (2)
   ______SD (1)

3. Classes at this university are so regimented that there is little room for the personal needs and interests of the student. (p)
   ______ SA (5)
   ______ A (4)
   ______ U (3)
   ______ D (2)
   ______SD (1)

4. The faculty has too much control over the lives of students at this university. (p)
   ______ SA (5)
   ______ A (4)
   ______ U (3)
   ______ D (2)
   ______SD (1)

5. The bureaucracy of this university has me confused and bewildered. (m)
   ______ SA (5)
   ______ A (4)
   ______ U (3)
   ______ D (2)
   ______SD (1)
6. I feel that I am an integral part of this university community. (s)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

7. Things have become so complicated at this university that I really don't understand just what is going on. (m)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

8. I seldom feel “lost” or “alone” at this university. (s)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

9. The collective voice of students carries very little weight at this university. (p)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

10. I don’t have as many friends as I would like at this university. (s)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

11. Most of the time I feel that I have an effective voice in the decisions regarding my destiny at this university. (p)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)  

12. Life at this university is so chaotic that the student really doesn’t know where to turn. (m)  
      SA (5)  
      A (4)  
      U (3)  
      D (2)  
      SD (1)
13. Many students at this university are lonely and unrelated to their fellow human beings. (s)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

14. More and more, I feel helpless in the face of what’s happening at this university today. (p)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

15. There are forces affecting me at this university that are so complex and confusing that I find it difficult to effectively make decisions. (m)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

16. I can’t seem to make much sense out of my university experience. (m)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

17. My experience at this university has been devoid of meaningful relationships. (s)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

18. The administration has too much control over my life at this university. (p)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

19. This university is run by a few people in power and there is not much the student can do about it. (p)
   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)
20. The student has little chance of protecting his or her personal interests when they conflict with those of this university. (p)

   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

21. In spite of the fast pace of this university, it is easy to make many close friends that you can really count on. (s)

   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

22. My life is so confusing at this university that I hardly know what to expect from day to day. (m)

   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

23. In this fast-changing university, with so much conflicting information available, it is difficult to think clearly about many issues. (m)

   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

24. This university is just too big and impersonal to provide for the individual student. (s)

   SA (5)
   A (4)
   U (3)
   D (2)
   SD (1)

APPENDIX D
### SELF-PERCEPTION PROFILE FOR COLLEGE STUDENTS

The following are statements, which allow college students to describe themselves. There are no right or wrong answers since students differ markedly. Please read the entire sentence across. First decide which one of the two parts of each statement best describes you; then go to that side of the statement and check whether that is just sort of true for you or really true for you. You will just check ONE of the four boxes for each statement. Think about what you are like in the college environment as you read and answer each one.

<table>
<thead>
<tr>
<th>Really True For Me</th>
<th>Sort of True For Me</th>
<th>BUT</th>
<th>Sort of True For Me</th>
<th>Really True For Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>Some students like the kind of person they are</td>
<td>BUT</td>
<td>Other students wish they were different</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Some students feel confident that they are mastering their coursework</td>
<td>BUT</td>
<td>Other students do not feel so confident</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>Some students are not satisfied with their social skills</td>
<td>BUT</td>
<td>Other students think their social skills are just fine</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>Some students are not happy with the way they look</td>
<td>BUT</td>
<td>Other students are happy with the way they look</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>Some students feel like they are just as smart or smarter than other students</td>
<td>BUT</td>
<td>Other students wonder if they are as smart</td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td>Some students are often disappointed with themselves</td>
<td>BUT</td>
<td>Other students are usually quite pleased with themselves</td>
</tr>
<tr>
<td></td>
<td>Really True For Me</td>
<td>Sort of True For Me</td>
<td></td>
<td>Sort of True For Me</td>
</tr>
<tr>
<td>---</td>
<td>-------------------</td>
<td>---------------------</td>
<td>---</td>
<td>---------------------</td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td>Some students do very well at their studies</td>
<td>BUT</td>
<td>Other students don't so very well at their studies</td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td>Some students find it hard to make new friends</td>
<td>BUT</td>
<td>Other students are able to make new friends easily</td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td>Some students are happy with their height and weight</td>
<td>BUT</td>
<td>Other students wish their height or weight was different</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>Some students do not feel they are mentally able</td>
<td>BUT</td>
<td>Other students feel that they are very mentally able</td>
</tr>
<tr>
<td>27.</td>
<td></td>
<td>Some students usually like themselves as a person</td>
<td>BUT</td>
<td>Other students often don't like themselves as a person</td>
</tr>
<tr>
<td>29.</td>
<td></td>
<td>Some students have trouble figuring out homework assignments</td>
<td>BUT</td>
<td>Other students rarely have trouble with their homework assignments</td>
</tr>
<tr>
<td>30.</td>
<td></td>
<td>Some students like the way they interact with other people</td>
<td>BUT</td>
<td>Other students wish their interactions with other people were different</td>
</tr>
<tr>
<td></td>
<td>Really True For Me</td>
<td>Sort of True For Me</td>
<td>BUT</td>
<td>Sort of True For Me</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>---------------------</td>
<td>-----</td>
<td>---------------------</td>
</tr>
<tr>
<td>31.</td>
<td></td>
<td></td>
<td>Some students wish their body was different</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td></td>
<td></td>
<td>Some students feel they are just as bright or brighter than most people</td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td></td>
<td></td>
<td>Some students really like the way they are leading their lives</td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td></td>
<td></td>
<td>Some students sometimes do not feel intellectually competent at their studies</td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td></td>
<td></td>
<td>Some students feel that they are socially accepted by many people</td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td></td>
<td></td>
<td>Some students like their physical appearance the way it is</td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td></td>
<td></td>
<td>Some students would rather be different</td>
<td></td>
</tr>
</tbody>
</table>
Some students question whether they are very intelligent, but other students feel they are intelligent.

Some students are often dissatisfied with themselves, but other students are usually satisfied with themselves.
INFORMED CONSENT

Title: The Impact of Levels of Cultural Congruity, University Alienation, and Self-Concept in Multiracial College Students

Investigator: Derrick A. Paladino, Ed.S., Doctoral Candidate
Department of Educational Leadership, Counseling & Foundations
Counselor Education Program
136 Graduate Education Building
Fayetteville, AR 72701
479-444-6163
dpaladi@uark.edu

Description: The present study will investigate levels of cultural fit, university alienation, and self-concept of multiracial/biracial college students. Participants will be asked to complete a brief demographic form, the Cultural Congruity Scale, University Alienation Scale, and part of the Self-Perception Profile for College Students.

Risks and Benefits: The benefits include contributing to the knowledge base in the area of multiracial identity. In addition, compensation includes a drawing to win one of three $50 gift certificates to either Wal-Mart or Best Buy. If you would like to be part of this drawing there is a line in the demographic questionnaire for your e-mail address. This information will only be used to contact you if you are one of the gift certificate winners. There are no anticipated risks to participating in this study.

Voluntary Participation: Participation in this research is completely voluntary.

Confidentiality: You will be assigned a code number that will be used to match the demographic sheet and other surveys. All information will be recorded anonymously. All information will be held in the strictest of confidence. Results from the research will be reported as aggregate data only.

Right to Withdraw: You are free to refuse to participate in the research and withdraw at any time. Your decision to withdraw will bring no negative consequences — no penalty to you.

Informed Consent: I, ____________________________, have read the description (Please Print)
including the purpose of the study, the procedures to be used, the potential risks and side effects, the confidentiality, as well as the option to withdraw from the study at any time. My signature below indicates that I freely agree to participate in this study and that I have received a copy of this agreement from the investigator. I know that the researcher listed above and/or his/her associates will be available to answer any questions I may have. If at any time, I feel that my questions have not been adequately answered, I may request to speak with either the principle researcher or dissertation director (Rebecca A. Newgent, rmewgent@uark.edu).

__________________________  __________________________
Signature Date

Please leave this sheet attached and continue to the next page
December 2003

Dear Participant:

As part of my work toward a doctorate degree in the Department of Educational Leadership and Counseling Foundations, I am conducting a study on multiracial college students.

The purpose of this study is to investigate levels of cultural fit, university alienation, and self-concept of multiracial/biracial college students.

Anonymity of you, as the respondent and your responses, will be protected throughout the study and publication.

Participation in this study is voluntary, and you can refrain from answering any or all questions without penalty or explanation. The benefits include contributing to the knowledge base in the area of multiracial identity. In addition, compensation includes a drawing to win one of three $50 gift certificates to either Wal-Mart or Best Buy. If you would like to be part of this drawing there is a line in the demographic questionnaire for your e-mail address. This information will only be used to contact you if you are one of the gift certificate winners. Please note that your responses are appreciated and will add to the validity of the study.

It is estimated that your participation will take approximately 20 minutes. Your participation will involve signing the Informed Consent Statement and completing a brief demographic form, the Cultural Congruity Scale, University Alienation Scale, and parts of the Self-Perception Profile for College Students.

If you have any questions or comments concerning the study, you can contact me at (479-444-6163) or my dissertation chair Dr. Rebecca Newgent (479-575-7311).

Thank you for your assistance.

Sincerely,

Derrick Paladino

Please detach this sheet and keep it for your records.
APPENDIX G
MEMORANDUM

TO: Dr. Rebecca Newgent
    Derrick A. Paladino
FROM: Bobbie Biggs, Chair
       Institutional Review Board
DATE: January 22, 2003
RE: IRB PROTOCOL (EXEMPT) APPROVAL
    Ending date: 01/20/2005

The Institutional Review Board (IRB) has approved Protocol # 04189, "Cultural Congruity, University Alienation, and Self-concept upon Multiracial Students' Adjustment to College" and has confirmed its Exempt status. You may begin your study.

Should the study require an extended period beyond the ending date, (01/20/2005), approval must be obtained to lengthen the research period and reflect the new ending date. If the extension requested is no longer than one year from the approval date (01/20/2004), then a memo addressed to the IRB Chair is sufficient. Otherwise, an extension is to be requested via the Continuing Review Form, which will be sent out approximately eleven months from the initial approval date (01/20/2004). By U of A policy, the IRB cannot approve protocols for longer than one year without having them resubmitted for further approval. Also if further modifications are made to the protocol during the study, please submit a written request to the IRB for review and approval before initiating any changes.

The IRB appreciates your assistance and cooperation in complying with University and Federal guidelines for research involving human subjects.

/hkb

C: Dr. George Denny
APPENDIX H
18 November 2003

To Whom It May Concern:

Please accept this letter as my permission for Derrick Paladino to use the Cultural Congruity Scale for his dissertation as well as make copies of it for his survey.

After the study is completed, I ask that I be provided results of study and specific information about the scale (e.g., means, standard deviations, inter-item coefficients, overall alpha, correlations, and predictive validity information).

Best wishes with your research endeavors.

Sincerely,

[Signature]

Alberta M. Gloria, Ph.D.
Associate Professor and Director of Training
November 9, 2003

Mr. Derrick A. Palandino  
1175 West Leroy Pond Dr, # 269  
Fayetteville, AR 72701

Dear Mr. Palandino,

I write to give you permission to use the University Alienation Scale for your dissertation research. I wish you good fortune with your study and please let me know how your research turns out.

With best wishes,

Hal Burbach, Professor  
Curry School of Education  
University of Virginia
Derrick,

You raise an excellent question. I have not used the scale in many years so I haven't bothered to change it. If you would like to reword this particular item, give me a couple of suggestions and we can change it.

All the best,

Hal Burbach

Dr. Burbach,

item is #9 Students are just so many cogs in the machinery at this university. (p). -to-

Students have only a fraction of the voice in the university mechanism

How does this sound?

Derrick,

I think you are on the right track. How about something simple like:

"The collective voice of students carries very little weight at this university."

All the best,

Hal Burbach
Dr. Harter,

My name is Derrick Paladino and I am a doctoral student in Counselor Education at the University of Arkansas. I have recently begun the dissertation phase of my graduate work. I have selected your Self-perception Profile for College Students as an instrument in my study. I plan to look at the impact of self-concept on multiracial individuals and monoracial individuals on college campuses as part of my study. Your instrument will be an invaluable part of my study.

I was wondering where I could get a copy of this instrument and if I would have you permission to use it. I appreciate any information. If you would like to hear more about the scope of my study, I would be more than happy to let you know.

Sincerely,

Derrick

Derrick A. Paladino, Ed.S., NCC, LAC
Doctoral Student, Counselor Education/
Counselor-in-Residence, University Housing
University of Arkansas
dpaladi@uark.edu Work: (479)718-1026

Please see the attachments and thank you for your interest in our work.

Susan Harter
Department of Psychology
University of Denver
2155 S. Race St.
Denver, Colorado 80208

FAX: (303) 871-4747
THE EFFECTS OF CULTURAL CONGRUITY, UNIVERSITY ALIENATION, AND SELF-CONCEPT UPON MULTIRACIAL STUDENTS' ADJUSTMENT TO COLLEGE

Abstract of dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

By

Derrick Adam Paladino, B.S., M.Ed., Ed.S.
University of Florida, 1998
University of Florida, 2001
University of Florida, 2001

August 2004
University of Arkansas
This abstract is approved:

Dissertation Director:

[Signature]

Rebecca A. Newgent, Ph.D.
ABSTRACT

The purpose of this study is to examine key factors that relate to the self-perception of cultural congruity, university alienation (powerlessness, meaninglessness, and social estrangement), and self-concept (perceived intellectual ability, perceived scholastic competence, perceived social acceptance, appearance, and global self-worth) in multiracial college students. One goal of this study is to discover if there is a relationship between cultural congruity, alienation, and self-concept among multiracial college students. In addition, this study examined what factors predict cultural congruity, university alienation, and self-concept in multiracial college students. Finally, this study explored the relationship of cultural congruity, university alienation, self-concept, and specific demographic constructs with multiracial college students.

The participants in this study were 71 multiracial college students from multiracial college support groups throughout the United States. Each participant completed the College Minority Student Demographic Data Form, the Cultural Congruity Scale, the University Alienation Scale, and the Self-Perception Profile for College Students. The following five domains of the Self-Perception Profile for College Students were included in the data analysis: Perceived Intellectual Ability, Perceived Scholastic Competence, Perceived Social Acceptance, Appearance, and Global Self-Worth. The following domains of the University Alienation Scale were included in the data analysis: Meaninglessness, Powerlessness, Social Estrangement, and overall University Alienation.

Significant relationships were discovered between Cultural Congruity and Social Estrangement, Cultural Congruity and Perceived Scholastic Acceptance, and Meaninglessness and Perceived Social Acceptance. Data revealed scale means similar to

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monoracial-minority individuals from past studies. Overall, self-concept subscales contributed to a significant proportion of variance for multiracial college students. Sex accounted for a significant proportion of variance in Global Self-Worth, and Parental College Experience accounted for a significant proportion of variance in Cultural Congruity, Meaninglessness, University Alienation, Global Self-Worth, Appearance, and Intellectual Ability. The results from this baseline study add to the limited literature on multiracial college students, partially supports past qualitative research on multiracial college students, and furthers the discussion on themes and identity issues faced by this population.