AN INVESTIGATION OF LIFE-SKILLS DEVELOPMENT, RACIAL/ETHNIC IDENTITY, SELF-ESTEEM, AND SELF-EFFICACY IN HIGH ACHIEVING UNDERGRADUATES OF COLOR

by

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(Under the Direction of Rosemary E. Phelps)

ABSTRACT

Over the last decade, there has been an increase in the recruitment and enrollment of international and historically underrepresented students of color at Traditionally White Institutions (TWIs). Furthermore, there has been an increase in specific, intentional efforts to recruit high achieving students of color to TWIs through special programs and university-wide diversity initiatives. The increasing cultural and racial/ethnic diversity at TWIs through special programs and diversity recruitment initiatives requires educators, counseling psychologists, student affairs professionals, and other human services professionals to investigate the unique development and psychological well-being of high achieving undergraduates of color

The purpose of this study was to empirically investigate life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in high achieving undergraduates of color. Specifically, this study first explored differences based on gender and race/ethnicity on measures of life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. Secondly, the relationship among life-skills, racial/ethnic identity, self-esteem, and self-efficacy were investigated. Finally, some of the messages high achieving undergraduates receive from their

primary caregivers related to life-skills development, racial/ethnic identity, self-esteem, and self-efficacy were explored.

A mixed-method research design was utilized to conceptualize this study. Fifty-seven high achieving undergraduate students of color participated in the study. Results indicated that gender did not significantly influence life-skills development, racial/ethnic identity, self-esteem, or self-efficacy. Race/ethnicity was found to have an impact on life-skills development, racial/ethnic identity, and self-esteem. Significant relationships were also found among scores on all measures. Qualitative analysis resulted in three major messages that currently influence the thoughts and behaviors of participants the most: (1) the meaning of success, (2) how to handle difficult problems, and (3) the importance of education. Suggestions for future research, program development issues, and counseling implications are addressed.

INDEX WORDS: African American undergraduates, Asian undergraduates, Biracial/Multiracial undergraduates, Black undergraduates, Caucasian undergraduates, gifted undergraduates, high achieving undergraduates, Hispanic and Latina/o undergraduates, honors students, life-skills development, racial/ethnic identity, self-efficacy, self-esteem, student development, Traditionally White Institutions, undergraduate research programs

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DEDICATION

This work is dedicated to my devoted parents, Ardella D. Packer and the late Ellis Packer. I was truly blessed to have such loving parents who instilled in me a love for education, heritage, and culture.

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CHAPTER 1

INTRODUCTION

Over the last decade, there has been an increase in the recruitment and enrollment of international and historically underrepresented students of color at Traditionally White Institutions (TWIs) (Lackland, McLeod-Bryant, & Bell, 1998). Furthermore, there has been an increase in specific, intentional efforts to recruit high achieving students of color to TWIs through special programs and university-wide diversity initiatives (Martinez, 2000; Nagda et al., 1998; Prentice-Dunn & Roberts, 1985). Such initiatives include the National Research Experience for Undergraduates Program (NREUP), the Minority Access to Research Careers Program (MARC), The Ronald E. McNair Postbaccalaureate Achievement Program, and Undergraduate Research Opportunities Program (UROP) (Hawkins, 2005; Martinez, 2000; Nagda, et al., 1998; Prentice-Dunn & Roberts, 1985; U.S. Department of Education, 2005). The overall goals of these diversity initiatives include: (a) increasing the enrollment and retention of students of color in institutions of higher learning (b) teaching students of color about research and/or specific academic topics, (c) providing students with faculty advisors and/or research mentors, and (d) encouraging and preparing students for entrance into graduate programs (Hawkins, 2005; Martinez, 2000; Nagda, et al., 1998; Prentice-Dunn & Roberts, 1985; U.S. Department of Education, 2005). A premier example of a university-wide initiative is The University of Georgia's Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP), which was developed specifically to enhance and increase the recruitment

and retention of high achieving, historically underrepresented students of color (P.B. Kleiber, personal communication, April 21, 2005) . The increasing cultural and racial/ethnic diversity at TWIs through special programs and diversity recruitment initiatives, such as the CURO-AP, requires educators, counseling psychologists, student affairs professionals, and other human services professionals to investigate the unique development and psychological well-being of high achieving undergraduates of color (Lease, 2002; Picklesimer, 1991).

Research on the development and psychological well-being of high achieving students has customarily focused on pre-college students, particularly elementary and high school students (Olenchack & Hebert, 2002). However, the development and psychological well-being of high achieving college students is equally worthy of consideration (Lease, 2002; Schroer & Dorn, 1986). The developmental period of traditional college students warrants special investigation because research strongly suggests that patterns established at this time tend to persist long into adulthood (Picklesimer & Miller, 1998; Prince, 1973). How a college student approaches and ultimately resolves developmental tasks is a fundamental factor in a student's eventual life style.

Life-skills, racial/ethnic identity, self-esteem, and self-efficacy have been identified by researchers in education and psychology as critical variables to investigate (Gazda et al., 1987; Meche, 2002; Yeh & Huang, 1996). In an effort to understand the development and psychological well-being of college students, a comprehensive paradigm that has successfully been used to examine the development and unique needs of college students is the Life-Skills Model (Gazda et al., 1987; Gloria & Hird, 1999;

Picklesimer, 1991; Picklesimer & Miller, 1998; Winston, Miller, & Cooper, 1999). The model identifies broad, generic life-skills areas which include problem-solving/decision making, physical fitness/health maintenance, interpersonal communication/human relations, and identity development/purpose in life.

Life-skills

Life-skills is defined as all the skills and knowledge a person experiences, apart from academic skills, which are necessary for effective living (Gazda, 1992). This general definition is not meant to imply that academic skills are not important for effective living (Meche, 2002; Taylor, 1991). Instead, the focus of the definition is on separating those skills that have traditionally been the primary concerns of our educational institutions from those skills identified as secondary concerns or of little or no concern (Gazda et al, 1987). Prior research on the Life-Skills Model suggests that age-related differences in various coping skills exist (Barnas, Pollina, & Cummings, 1991; Bassey, 1998; Berg, Meegan, & Klaczynski; 1999, Bream, 1997; Hartley & Little, 2000; Jagacinski, 1997; Meche, 2002; Sommers, 1997; Steptoe, Moses, & Edwards, 1990; Widagdo, Pierson, & Helme, 1999). However, little research has investigated race /ethnicity and/or gender related differences.

The purpose of the Life-Skills Model is to assess an individual's life-skills and then determine prevention and intervention strategies for educational and/or clinical purposes (Gazda, 1992). School, university, and college counseling centers; community mental health centers; residential treatment centers; psychiatric hospitals; and independent practitioners utilize the Life-Skills Model as a means of promoting effective life functioning and quality of living (Darden, 1991; Gazda, 1992; Ginter, 1999; Meche,

2002; Taylor, 1991). It seems crucial to understand how life-skills are exhibited in college students, including high achieving students of color.

Racial/Ethnic Identity

Prior research (e.g., Crocker, et al., 1994) has established that racial/ethnic identities are crucial to effective psychological functioning for people of color. Phinney (1992) identified multiple aspects of racial/ethnic identity that are applicable to most racial/ethnic groups, including self-identification, affirmation and belonging, positive racial/ethnic attitudes, and racial/ethnic involvement and practices. Phinney also proposed that these interrelated aspects of racial/ethnic identity play a critical part in the maintenance and safeguarding of self-esteem, self-efficacy, and a sense of belonging for minorities in the United States, particularly when they are confronted with prejudice and discrimination in society (Lee & Yoo, 2004). Thus, investigating the role of racial/ethnic identity in high achieving students of color is important because of its impact on self-esteem and self-efficacy.

Self-esteem

General self-esteem refers to general feelings of self-worth and self-value. It is considered a favorable or unfavorable attitude toward the self (Rosenberg, 1965). The National Association for Self-Esteem reports that individuals with healthy or high general self-esteem are characterized by tolerance and respect for others, accept responsibility for their actions, have integrity, take pride in their accomplishments, are self-motivated, willing to take risks, are capable of handling criticism, are loving and lovable, seek the challenge and stimulation of worthwhile and demanding goals, and take command and control of their lives (National Association for Self-Esteem, 2005). Individuals with high

self-esteem are also described as being able to trust their own being to be life-affirming, constructive, responsible, and trustworthy.

Collective self-esteem refers to the degree to which individuals evaluate their social or cultural groups positively (Luhtanen & Crocker, 1992). Luhtanen and Crocker purport that individuals with high collective self-esteem are primarily concerned with enhancing themselves for the purpose of positive evaluation for their own social or cultural group. Constantine, Robinson, Wilton, and Caldwell (2002) report that members of collectivist cultures (i.e., cultures characterized by individuals' tendency to place value on connectedness to others and achieving and maintaining harmonious relationships), view the self as part of a group rather than as an individual being. "Although the United States is largely characterized as valuing individualism over collectivism, many people of color within the United States are seen as primarily maintaining values associated with collectivism" (Constantine, Robinson, Wilton, & Caldwell, 2002, p. 308). Research suggests that possessing collective self-esteem may be necessary for the successful matriculation of students of color at TWIs (Constantine, Robinson, Wilton, & Caldwell, 2002). Investigating whether collective self-esteem is as relevant for high achieving students of color seems justified.

Self-efficacy

Self-efficacy refers to an individual's beliefs that he or she can perform specific behaviors to achieve particular performance outcomes (Gloria & Hird, 1999). Bandura (1986) suggests that self-efficacy is the most important mechanism of personal agency or personal action control. Hackett and Byars (1996) report that the experience of being racially/ethnically different can arouse anxiety in students, which in turn influences one's

self-efficacy. Investigating and understanding the self-efficacy of students of color is important as it is related to the concept of racial/ethnic salience (i.e., the degree to which a person perceives race/ethnicity as a significant definer of one's future career options and experiences) (Constantine, Robinson, Wilton, & Caldwell, 2002; Helms & Piper, 1994).

Statement of the Problem

Investigations of college students' life-skills development, racial/ethnic identity self-esteem, and self-efficacy have been overwhelmingly conducted on White undergraduates. While there have been efforts to explore these key factors in students of color, these studies mostly focus on academic underachievement and attrition (Baker, Bridger, & Evans, 1998; Cheryan & Bodenhausen, 2000; Gloria & Hird, 1999; Olenchak & Hebert, 2002). Currently, there is little research that examines the life-skills development, racial/ethnic identity, self-esteem, and self-efficacy of high achieving undergraduates of color. Furthermore, while the literature on academically talented students of color in higher education has scarcely focused on the influence of racial/ethnic identity, there has been even less attention paid to within group differences and the role of gender (Steward, Gimenez, & Jackson, 1995).

Research utilizing the Life-Skills Model has demonstrated that a relationship exists between life-skills, self-esteem, and well-being in predominately White populations (Gazda et al., 1987; Meche, 2002). However, there has been little investigation on the relationship between life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in students of color, particularly high achieving students.

Picklesimer (1991) recommends that the Life-Skills Development Inventory for College Students be administered to students of color to establish normative data for these populations. She further recommends that additional studies be conducted in an attempt to determine whether the Life-Skills Development Inventory for College Students is biased toward students of color. Finally, Picklesimer recommends administering the inventory to students of color, particularly African Americans, attending TWIs.

Few theories and models of college student development address the experiences of high achieving students of color. Often high achieving students are supported with special programs during their pre-college years (Olenchak & Hebert, 2002). However, this support often diminishes during their college education (Lease, 2002; Schroer & Dorn, 1986). As institutions of higher education continue to specifically recruit high achieving students of color, it will be imperative to gain an understanding of their development. This insight will aid faculty, administrators, and helping professionals in providing culturally sensitive and relevant support.

Purpose of the Study

The purpose of this study is to empirically investigate life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in high achieving undergraduates of color. Specifically, this study will first explore differences based on gender and race/ethnicity on measures of life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. Secondly, the relationship among life-skills, racial/ethnic identity, self-esteem, and self-efficacy will be investigated. Finally, some of the messages high achieving undergraduates receive from their primary caregivers related to life-skills development, racial/ethnic identity, self-esteem, and self-efficacy will be explored.

The field of counseling psychology was originated by Frank Parsons (1909) and his work in student development and the vocational guidance movement in schools. Today, counseling psychology has grown as a psychological specialty that focuses on "personal and interpersonal functioning across the life span with a focus on emotional, social, vocational, educational, health-related, developmental, and organizational concerns" (American Psychological Association, 2005). Counseling psychology has a strong history of being sensitive to multicultural issues, attending to normal developmental issues, and helping people improve their psychological well-being (American Psychological Association, 2005). This study is deeply rooted in the foundation of counseling psychology as it integrates the field's past and present foci by investigating issues surrounding student development (life-skills development), multicultural issues (gender, race/ethnicity, giftedness), and psychological well-being (self-esteem, self-efficacy, racial/ethnic identity).

Research Questions and Hypotheses

The present study will investigate the following research questions and null hypotheses:

Research Question 1: *Are there differences based on gender on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?*

Null Hypotheses:

1. There will be no statistically significant differences based on gender on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).

2. There will be no statistically significant differences based on gender on racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).
3. There will be no statistically significant differences based on gender on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).
4. There will be no statistically significant differences based on gender on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).
5. There will be no statistically significant differences based on gender on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

Research Question 2: *Are there differences based on race/ethnicity on life-skills development, racial/ ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?*

Null Hypotheses:

1. There will be no statistically significant differences based on race/ethnicity on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).
2. There will be no statistically significant differences based on race/ethnicity on racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).
3. There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

4. There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).
5. There will be no statistically significant differences based on race/ethnicity on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

Research Question 3: What is the relationship among life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduate students of color?

Null Hypothesis:

1. There will be no statistically significant relationship among scores on the Life-Skills Inventory – College Form (Picklesimer & Gazda, 1996), the Multigroup Ethnic Identity Measure (Roberts et al., 1999) the Rosenberg Self-Esteem Scale (Rosenberg, 1965), The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994), The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

Research Question 4: What are some of the messages given to high achieving undergraduate students of color from their primary caregivers that influence their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy?

Definitions of Terms and Theoretical Considerations

Definitions of terms and theoretical considerations that are important in understanding this study are presented in this section.

1. *Traditionally White Institutions (TWIs):* institutions of higher education whereby traditionally the majority of its matriculates are Caucasian American. Individuals of other races and ethnicities who attend TWIs comprise a minority of the student population.
2. *Student of color:* non-White/Caucasian student that is part of a minority racial and/or ethnic group in the United States.
3. *The Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP):* an undergraduate research program specifically designed to enhance and increase the recruitment and retention of underrepresented students of color at The University of Georgia.
4. *Self-esteem:* refers to general feelings of self-worth and self-value. "A favorable or unfavorable attitude toward the self" (Rosenberg, 1965, p. 15).
5. *Collective self-esteem:* the aspect of identity people have regarding their social groups. Collective self-esteem consists of four categories: Membership, Public, Private, and Identity. Individuals with high collective self-esteem regarding gender believe they are worthy members of their gender group (Membership), and are personally or privately glad to be a member (Private). They feel that others respect their group (Public), and see membership in their gender group as an important aspect of their identity (Identity) (Luhtanen & Crocker, 1992).

6. *Perceived self-efficacy:* belief that one can perform novel or difficult tasks or cope with adversity in various domains of human functioning. It facilitates goal setting, effort investment, persistence in the face of barriers, and recovery from set backs (Schwarzer & Jerusalem, 1995).
7. *Racial/Ethnic identity:* how one interprets and understands his or her own race/ethnicity, including one's self-identification as a group member, sense of belonging, and attitudes towards one's group (Phinney, 1992; Phinney, 1996). Racial/ethnic identity is "not a fixed categorization, but rather is a fluid and dynamic understanding of self and ethnic background" (Phinney, 2003, p.63). Racial/ethnic identity is constructed and modified as individuals become aware of their ethnicity, within the larger (sociocultural) setting. Although there continues to be a debate in the field of psychology regarding whether the construct of ethnicity should replace race as a focus of scientific study (Helms, Jernigan, & Mascher, 2005), race and ethnicity will be used interchangeably in this study.
8. *High achieving students:* a student who demonstrates a high degree of intellectual and/or creative ability(ies), exhibits an exceptionally high degree of motivation, and/or excels in specific academic fields. These students maintain an overall grade point average above a 3.0, is a member of the Center for Undergraduate Research Opportunities Apprentice Program, and may be a member of The University of Georgia's Honors Program.
9. *Social Skills:* the specific abilities that enable a person to perform competently at particular social tasks, including the ability to dress and behave appropriately, and to observe the rules about what to say and not to say (Spitzberg & Cupach, 1989).

10. *Life-skills*: the skills and knowledge, in addition to academic skills, that are necessary for effective living (Gazda & Brooks, 1980).
11. *Interpersonal communication/human relations skills (IPC/HR)*: those skills related to personal psychosocial development (e.g., effective communication, small and large group and community membership and participation, management of interpersonal intimacy, clear expression of ideas and opinions, and giving and receiving feedback) (Brooks, 1984).
12. *Problem-solving/decision-making skills (PS/DM):* those skills related to information seeking, information assessment and analysis skills, problem identification, solution implementation and evaluation, goal setting, systematic planning and forecasting skills, time management, critical thinking, and conflict resolution skills (Brooks, 1984).
13. *Physical fitness/health maintenance skills (PF/HM)*: those skills necessary for motor development and coordination, nutritional maintenance, weight control, physical fitness, athletic participation, physiological aspects of sexuality, stress management, safety, and selection of leisure activity (Brooks, 1984).
14. *Identity development/purpose in life skills (ID/PIL):* underlies the other three generic categories of life-skills and includes those skills related to the development of personal values, self-esteem, emotional expression, capacity for interpersonal intimacy, career direction, and a sense of place and purpose in life (Gazda et al., 1987).

Limitations

The limitations of this study are as follows:

1. A correlational research design will be utilized in this study; thus, causation cannot be inferred.
2. Non-random sampling procedures may limit the generalizability of this study.
3. Generalizability may be limited since this study only examines students in the Center for Undergraduate Research Opportunities (CURO) Apprentice Program at a Research Extensive institution in the southeastern United States.
4. Only CURO Apprentices still in attendance at the university will be asked to participate.
5. The outcome of this study may be influenced by the fact that participation in the study was on a voluntary basis.
6. Students may not honestly complete questionnaires for concern about the consequences of their academic future.

Delimitations

The scope of this study is confined to the following delimitations:

1. Current students participating in the CURO Apprentice Program at a Traditionally White Research Extensive institution in the southeastern region of the United States will comprise the sample. Graduates of the CURO Apprentice Program will not be included in the study because during their enrollment the program had a different director with different goals for the program.

Assumptions

The basic assumptions that guide the conceptualization, development, and implementation of this study include:

1. Responses on the self-report questionnaires will be confidential.
2. Participants will provide honest answers on the self-report instruments and will not feel pressured to respond in a socially desirable manner.

CHAPTER 2

REVIEW OF RELATED LITERATURE AND RESEARCH

The purpose of this chapter is to (a) review the literature related to the Life-Skills Model, (b) review the literature related to the development of college students including high achieving students, high achieving students of color, gender issues in the development of high achieving students, and (c) review the literature related to the psychological well-being of college students including racial/ethnic identity issues, self-esteem issues, and self-efficacy issues in the development of high achieving students of color.

Life-Skills Model

Gazda (1989) developed a model based on the core concept of social skills. Cartledge and Milburn (1986) defined social skills as socially acceptable, learned behaviors that enable people to interact with others in ways that elicit positive responses and provide avenues to assist in avoiding negative responses from others. Gazda and Brooks (1984) subsumed social skills under life-skills. Gazda, Childers, and Brooks (1987) defined life-skills as "all of those skills and knowledge prerequisite to development of the skills, in addition to the academic skills, that are necessary for effective living" (p.133). Ginter (1999) indicated that life-skills represent the "basic developmental building blocks of human existence – intrapersonal and interpersonal existence" (p. 191).

This very general definition of life-skills does not suggest that academic skills are not critical for effective living (Taylor, 1991). The primary goal is on distinguishing those skills that have previously been the primary concern of educational institutions

from those skills identified as secondary concerns or of no concern at all (Gazda et al., 1987). The word "life-skills" was deliberately hyphenated by these authors to distinguish it from other uses that are somewhat similar yet have different meanings and origins (Gazda et al., 1987; Meche, 2002; Taylor, 1991).

While social skills should be limited to interpersonal relations, life-skills are broader than social skills and represent broad and global organizations of general coping skills used in interpersonal and intrapersonal activities. Life-skills are essential to effective self-management and are applicable in both prevention and remediation (Gazda et al., 1987). The Life-Skills Model posits that intrapersonal development (e.g., physical fitness, health maintenance, career development, identity development skills) is just as important as those skills necessary for interpersonal development (Gazda, 1989). The model indicates that both interpersonal and intrapersonal skills are intertwined, influencing each other in relation to overall level of self-esteem, well-being, and adjustment (Meche, 2002). Thus, both interpersonal and intrapersonal components of behavior are collapsed into life-skills (Darden, Gazda, & Ginter, 1996).

Life-skills models are more comprehensive than social skills models. This characteristic sets the Life-Skills Model (Gazda et al., 1987) apart from comparable ones (Bickham, 1993). For example, general social skills include communication with others in order to get needs met (Meche, 2002). In the Life-Skills Model, life-skills would encompass not only the ability to communicate with others, but also the capability to foster mutually rewarding relationships and intimacies, the establishment and maintenance of friendships, and the ability to interact with others in a way that is mutually respectful (Meche, 2002; Picklesimer, 1991). Each of these skills enhances

individuals' emotional maturity and identity. Thus, both interpersonal and intrapersonal functioning are crucial in the Life-Skills Model in achieving happiness and well-being (Bickham, 1993).

The Life-Skills Model is based on the following assumptions (Darden, 1991; Gazda et al., 1987; Meche, 2002; Taylor, 1991):

1. There are primarily seven human development theoretical constructs that underlie the Life-Skills Model. These include: (a) psychosocial (Erikson, 1963; Havighurst, 1972; Lilienthal & Tryon, 1950); (b) physical-sexual (Gesell, Ilg, Ames, & Bullis, 1977); (c) vocational (Super, 1963); (d) cognitive (Flavell, 1963; Wadsworth, 1979); (e) ego (Loevinger, 1976); (f) moral (Kohlberg & Turiel, 1971); and affective (Dupont, 1979).
2. Coping behaviors (life-skills) can be determined that are age or stage related.
3. There are identifiable stages in each of the seven human development areas through which the person must progress if he or she is to master more advanced stages.
4. Accomplishment of skills is dependent upon mastery of coping behaviors appropriate to stage and task.
5. There is an optimal learning period associated with life-skills mastery (Havighurst, 1972).
6. Individuals achieve optimal functioning when they operationally master fundamental life-skills.
7. Neuroses and functional psychoses commonly result from failure to develop life-skills (Kazdin, 1979).

8. The Life-Skills Model operates under the premise that if the individual is taught the subskills of the four generic life-skills categories (Interpersonal Communication, Problem-Solving, Physical Fitness, Identity Development) during the optimum period of learning, the cumulative effect is to enable the person to effectively face life's problems and be less subject to mental and emotional disturbances.
9. The Life-Skills Model, introduced when emotional or mental disturbances occur, would serve the function of remediation.
10. The greater degree of disturbance, the greater the likelihood that the person is suffering from multiple life-skills deficits.

According to Picklesimer (1991), the final development leading to the Life-Skills Model was Brooks' Delphi dissertation study. Brooks' (1984) work was designed to develop a taxonomy of developmental life-skills divided into generic categories which would be consistent across the lifespan. The theories associated with the previously cited seven areas of human development were the source of Brooks' original 500 life-skills descriptors (Gazda, 1989). By eliminating duplicate descriptors, these were reduced to approximately 350 items. Human development experts grouped these descriptors by age group (childhood, adolescence, adulthood) and rated them according to their importance in human development (Gazda et al., 1987; Gazda, 1989). Furthermore, on the third and final round, experts were asked to classify the descriptors into generic life-skills categories (Picklesimer, 1991; Picklesimer & Miller, 1998). The four generic categories are as follows: a) interpersonal communication/human relation skills, b) problem-solving/decision-making skills, c) physical fitness/health maintenance skills, d) identity

development/purpose in life. The following is a brief summary of the four areas of generic life-skills and a breakdown of the adult life-skills descriptors within each area.

Interpersonal Communication/Human Relations Skills (IPC/HR). According to Erikson (1950, 1963) and Havighurst (1953, 1972), interpersonal communication/human relations skills relate to psychosocial development. This category (IPC/HR) consists of those skills necessary for effective communication, both verbal and nonverbal. The IPC/HR category also consists of seven necessary qualities for establishing and maintaining. These qualities include a) empathy, b) warmth and genuineness, c) clarity of expression, d) confrontation, e) ability to give and receive feedback calmly, f) community membership, and g) management of interpersonal intimacy (Brooks, 1984).

Problem-Solving/Decision Making Skills (PS/DM). According to Fishoff (1980), the term problem-solving as applied to life management is resolution of a task with a definite solution. By contrast, decision-making applies to dilemmas in which no solution stands out as clearly right or wrong. According to Maier (1970), effective decision making is implicit in productive problem solving. Problems and decisions are an inevitable and pervasive part of living. Therefore, college students must have the skills that enable them to make good decisions, which, in turn, can lead to good problem-solving skills. The problem-solving/decision-making (PS/DM) dimension is comprised of skills for information seeking, information assessment and analysis, problem identification, solution implementation and evaluation, goal setting, systematic planning and forecasting skills, time management, critical thinking, and conflict resolution skills (Brooks, 1984).

Physical Fitness/Health Maintenance (PF/HM). According to HealthDayNews (2005), cancer and cardiovascular diseases are the leading killers of Americans. These causes of death are responsive to lifestyle moderation. Of the risk factors associated with cardiovascular disease, age, gender, familial history, levels of cholesterol, blood pressure, tobacco usage, obesity, stress management, and exercise habits; only chronological age, familial history, and gender cannot be controlled or altered by lifestyle choice (Meche, 2002). Thus, the leading causes of death are diseases resulting from bad choices. Therefore, college students must have the knowledge and skills that enable them to make good choices with regard to diet and exercise. This dimension (PF/HM) is comprised of skills necessary for motor development and coordination, nutritional maintenance, weight control, physical fitness, athletic participation, physiological aspects of sexuality, stress management, safety, and selection of leisure activity (Brooks, 1984).

Identity Development/Purpose in Life Skills (ID/PIL). Individuals often face struggles in forming their own identity and in defining their purpose in life. According to Brooks (1984), the identity development/purpose in life (ID/PIL) category includes the necessary skills for ongoing development of personal identity and emotional awareness. This dimension underlies the other three and includes skills necessary for self-monitoring, maintaining positive self-view, manipulating and accommodating to one's environment, clarifying personal values, making moral choices, self-esteem, emotional expression, sex role development, certain aspects of sexuality, such as the capacity for interpersonal intimacy, and career direction (Brooks, 1984). Hence, this particular dimension involves individuals' sense of place and purpose in life (Gazda, Childers, & Brooks, 1987).

According to Gazda (1992), generic life-skills are theoretically intertwined. Even so, while development in one area is necessary, it does not ensure development in other areas. In some cases, development in one area may be compensatory for lack of development elsewhere. Finally, development in one area may accelerate or impede development in other areas.

Development of College Students

Historically, developmental psychologists have concentrated on the study of the maturation of children. However, the developmental theory of Erikson (1963) motivated developmental psychologists to expand their range of study to include adolescents and adults. Today, there is a growing recognition that college students, particularly high achieving college students and students of color face developmental tasks unique enough to their age group to warrant a specific concentration of study (Chickering & Reisser, 1993; Havighurst, 1972; Lease, 2002; Picklesimer, 1991).

In late adolescence and early adulthood individuals in college are faced with tremendous burdens as they attempt to complete their educations, choose an occupation, select a mate, decide whether to have a family, contend with financial demands, modify ties to the pre-adult world, and integrate aspects of adulthood (Berger, 1998; Picklesimer, 1991; Santrock, 1999). Craig (1992) characterized this time as both the most abundant and most stressful time in the life cycle given that young people typically enjoy good health and a great deal of energy, while simultaneously faced with the difficult tasks of adaptation.

"During the late teens and early twenties, young adults form tentative identities regarding their place in the social world" (Meche, 2002, p. 29). Erikson (1950, 1963)

suggests that the psychosocial stage of *identity versus identity confusion* is resolved during the beginning phases of early adulthood. This period of young adulthood in which college students begin to move into adulthood by separating from their family of origin and establishing their own identity is referred to as launching (Santrock, 1999). While launching, college students are expected to formulate personal life goals, complete the formation of a sense of identity, and become autonomous. The second psychosocial stage that is relevant to traditional-age college students is *intimacy versus isolation* which starts in the early twenties and runs through early adulthood. During this stage, college students either establish a mutually satisfying and close relationship with others or remain alone.

According to Meche (2002), skilled young adults will try to form relationships that broaden their social spectrum and establish intimacy. College students must try to maintain an intricate balance between intimacy and commitment of partners to each other on the one hand and independence and freedom from each other on the other hand (Sternberg & Barnes, 1988). Isolation can be due to failure to achieve intimacy or due to an identity too weak to risk the personal freedom that might be lost in union with others (Meche, 2002). Erikson (1950, 1963) suggests that when the developmental task of establishing intimacy goes unfulfilled, most young adults are lonely and endure isolation.

Examples of life-skills measured by the LSI-CF required for successful psychosocial development in college students (Gazda, 1989) includes: (a) relates to others with appropriate openness, (b) manages intimacy with close friends, (c) uses one's peers for support while maintaining individual autonomy, (d) maintains continuous satisfying relationships with family members, (e) forms close relationship based on

interdependence, (f) communicates wants and needs effectively, (g) uses interpersonal skills to expand one's relationships, and (h) behaves in relationships by balancing giving and getting.

In the vocational realm, entry into adulthood for college students is often marked by entrance into graduate, professional, or medical school; or into the job market (Meche, 2002; Phillips & Blustein, 1994). Ideally, college students narrow their career choices and initiate behaviors that enable them to enter a desired career in what is known as career specification (Super, 1963). During the end of their college career, college students have typically progressed from the point of career exploration to that of career establishment. During the establishment stage, they have selected a chosen field. They then implement the career choice and, in essence, establish a career identity (Marcia, 1987).

Example of life-skills of the LSI-CF that are relevant to vocational development in young adulthood (Gazda, 1989) includes: (a) identifies one's identity in terms of personal ideals and values implicit in particular occupations, (b) makes personally relevant appropriate educational and occupational decisions, (c) uses information-seeking skills to a job search, (d) sets personal professional goals and plans for their implementation, (e) manages conflicts on the job and at home, and (f) gets along with superiors and peers on the job.

According to Meche (2002), the life-skills of young adults will determine in large part how well they face the demands and challenges of this developmental period. They will also impact the self-esteem and well-being of the young adult (Gazda, 1992). According to the Life-Skills Model, higher levels of life-skills are reflected in that

individuals are better able to cope with the developmental tasks before them. The model also states that being able to cope successfully should enable individuals to have healthy emotional development, leading to a better sense of self-worth. Self-worth enhances self-concept and self-esteem. Conversely, the model asserts a link between lower skill levels or skills deficits and lower self-worth and lower self-esteem (Gazda, 1992).

Development of High Achieving College Students

While there is considerable literature regarding the psychosocial development of college students, there is little information available on the development of high achieving students (Lease, 2002). While research has generally focused on the psychosocial developmental needs of high achieving students in elementary and secondary schools, little research exists discussing the needs of these students at the collegiate level. The support from special programs designed to meet the needs of high achieving students in grades K-12 often ceases to exist when these students enter college.

The main source of support in higher education for high achieving students is generally honors programs and/or undergraduate research programs (Lease, 2002). A number of honors programs sponsor undergraduate research programs, such as The Center for Undergraduate Research Opportunities – Apprentice Program at The University of Georgia. Historically, honors programs began to appear on campuses after World War II. Undergraduate research programs did not become popular until the 1990s (Rodrick & Dickmeyer, 2002). According to Hakim (2000), "undergraduate research is a student-faculty collaboration to examine, share, and create new knowledge or works in ways commensurate with practices in the discipline" (p.10). Undergraduate research programs emphasize faculty-student collaboration in generating novel scholarly products

that will be shared with appropriate audiences (Rodrick & Dickmeyer, 2002). Research on the benefits on undergraduate research suggest that participation in undergraduate research programs facilitates and encourages learning and thinking in ways that are difficult to achieve in classroom situations (Strassberger, 1995). According to Hartmann (1990), students who participate in undergraduate research gain advantages not obtained by other students in the areas of critical thinking, problem identification, technical skills, theory and research, and informed decisions about graduate school.

While today there are many colleges and universities that offer an honors curriculum and undergraduate research opportunities for high achieving students, strong programs should also contain additional features such as special facilities, educational programs, extracurricular activities, and social programs designed to meet the academic and social needs of high achieving students (Lease, 2002). Byrne (1997) notes that true honors programs are a composite of curricular options and extracurricular opportunities designed to support the development of a motivated and challenged core of bright students.

While theories of young adult development are also as relevant to high achieving undergraduates as they are to the general undergraduate population, specific insight into the development of high achieving students has been explored by a number of theorists in gifted education. For example, Dabrowski's theory of Positive Disintegration (1964) states that gifted students may possess overexciteabilites, or heightened awarenesses, which have the potential to become the building blocks of extremely high moral development. Silverman (1993a) describes the Polish translation of overexcitability to be "superstimulatability," meaning "an unusual capacity to care, an insatiable love of

learning, vivid imagination, endless energy, and so forth" (p. 13). Dabrowski asserts that these overexcitabilities occur in five areas, psychomotor, intellectual, emotional, imaginational, and sensual (Lease, 2002). Furthermore, the theory of Positive Disintegration holds that people who possess these overexcitabilities have the potential for advanced development in personal, ethical, and psychosocial matters, especially as delineated by Dabrowski's (1964, 1967) five levels of integration. Research on the applicability of Dabrowski's theory to the gifted adds further to this discussion. Piechowski (1986) asserts that possessing overexcitabilities includes an increased likelihood of attaining self-actualization and moral development.

Other developmental differences among high achieving students have also been reported in the seminal works of Hollingworth (1939) and Terman (1931). Hollingworth was first in addressing the need to focus on the emotional development of the gifted. In Terman's landmark research on the gifted during the early twentieth century, he noted that there is an inversely proportional relationship between high intelligence and social ease and acceptance (Terman, 1931). Lease (2002) suggests the importance of understanding how high achieving as well as other students achieve advanced development through "the strengthening of one's value system, the creation of greater and greater challenges for oneself, and the development of broader avenues for expressing compassion" (Silverman, 1993, p. 22). While, high achieving students may undergo the same developmental process as other students, the differences that may be inherent in high achieving students may offer fertile ground for further research as to whether or not there are nuances present that create a contextually different developmental process (Lease, 2002).

Development of High Achieving College Students of Color

While most academically talented students are naturally attracted to the learning process, students of color may encounter external and internal barriers that hinder their learning (Fries-Britt, 2000). According to Hurtado (1999), some of the external barriers that exist on college campuses include the historical legacy of a campus, structural diversity (actual numbers of minority students and faculty), psychological climate, and behavioral dimensions of campus climate. Other barriers that may detract from learning result from internal struggles students of color may face as they encounter various levels of racial/ethnic identity and consciousness (Cross, 1991).

Specifically, Fries-Britt (2000) reports that high achieving students of color face the challenge of successfully blending an academic and racial identity. While high achieving students of color attempt to manage their intellectual ability, some find it necessary to either conceal their intelligence or prove that they are indeed intelligent because of a fear of rejection from peers or faculty. Fries-Britt found that both an academic identity and racial identity were significant in the experiences that high achieving students shared about their interactions with peers, the broader campus community, and faculty. As a result, both identities equally influenced how high achieving students of color connected to and interacted with others. According to Fries-Britt's study the "confidence and ability to blend their intellectual and racial self was enhanced as they encountered more peers like themselves and environments that supported their interests" (p. 57).

Gender Issues in the Development of High Achieving Students

Gender differences in development have been identified in the areas of moral development, autonomy, and independence (Gilligan, 1982; Josselson, 1987). In the study of the process of intellectual development, preferences and patterns have been identified but have not been labeled as distinctive gender differences (Baxter Magolda, 1992; Lease 2002). Gender-based issues in the development of high achieving students, particularly as they relate to females, are worthy of consideration and further study.

High Achieving Females

There is significant research which indicates a critical need to be concerned for the development of high achieving females. High achieving girls experience conflicts between gender identity and achievement motivation (Kerr & Foley-Nicpon, 2002). Research has consistently revealed that high achieving females often feel compelled to hide their intelligence in an effort to project a more feminine identity (Bell, 1989; Buescher & Higham, 1989; Buescher, Olszewski & Higham, 1987; Coleman, 1961; Keislar, 1955; Kerr, 1985, 1991; Noble, 1987; Reis & Callahan, 1989; Sadker & Sadker, 1994). Research has also shown that some women who attain academic success exhibit lower self-esteem than their counterparts (Lease, 2002). This phenomenon has been called the "imposter syndrome" (Clance, 1985; Machlowitz, 1982; Warschaw, 1985). As a result of this poor self-image, women attribute successes to a variety of reasons other than the fact that they deserved the success such as, external factors that were beyond their control (as opposed to internal factors), luck, and the help of others (Reis & Callahan, 1989). One of the detrimental aspects of this syndrome is that it involves

extreme self-criticism and can often cause academically talented females personal frustration and agony (Bell, 1989).

Callahan, Cunningham, and Plucker (1994) suggest that another phenomenon, the "Superwoman syndrome", can also be experienced by high achieving women. Female students with the Superwoman syndrome adhere to the notion that as high achieving women they should be able to successfully take on multiple roles simultaneously. Gilligan (1982) proposes that gifted young women are faced with what is termed "Sophie's Choice". If a woman chooses to be true to herself, to honor her drive for achievement and self-actualization, she breaks some unspoken social rule regarding gender roles and thus faces disconnection, taunts, and rejection from both male and female peers (Gilligan, 1982; Kerr & Foley-Nicpon, 2002). When faced with this choice, academically talented women believe that if they hold themselves back and focus on more socially acceptable feminine spheres (e.g., clothes, appearance, preoccupation with boys) they will be accepted and rewarded for their efforts. Kerr and Foley-Nicpon (2002) report that because little immediate value exists for choosing academic achievement over social acceptance, high achieving young women need to have a strong sense of self-esteem, self-competence, and self-assurance to make that choice.

Research on the self-concept and achievement of females found that high achieving girls with higher grades were found to be significantly more depressed and reported more psychosomatic symptoms (AAUW, 1992; Locksley & Douvan, 1980). Based on these collective phenomena, scholars assert that it may be critical for high achieving females to have opportunities to connect with other academically talented peers

early in life in an effort to aid them in valuing and developing their intellectual capabilities without loss of social status (Bell, 1989; Silverman, 1995).

High Achieving Males

Like high achieving females, males are often held to rigid gender roles. Underachievement has often been associated with high achieving males (Kerr & Foley-Nicpon, 2002; Lease, 2002). Colangelo, Kerr, Christensen, and Maxey (1993) report that underachievement is nine times higher in gifted males than females. Kerr & Foley-Nicpon (2002) suggest that underachievement may be a method high achieving males use to define their masculinity. High achieving males who do not ascribe to society's masculine standards may encounter difficult experiences in developing peer relationships.

Lease (2002) noted that high achieving men may exhibit a disconnect between their talents and abilities and the emotional and behavioral difficulties they face in adolescence and early adulthood. High achieving males have been reported in the literature as having a tendency to appear to be disengaging socially and have difficulty relating to his peers (Lovecky, 1993). Research suggests that high achieving males may also exhibit confusion and self-doubt because their cohort may be unable to see the important issues that are self-evident and clear to the high achieving male student (Lovecky, 1993). "As is the case with emotional sensitivities, gifted males who feel qualitatively different from their peers may choose to separate further from peer interactions" (Lease, 2002, p.4). All of these challenges in conjunction with giftedness may be forces at play impacting the development of high achieving men in the college environment.

Racial/Ethnicity Issues in Development

"Higher education is generally considered an important element in contemporary American society, but it is increasingly significant in the context of persistent social inequality based on race or ethnicity" (Mayo, Murguia, & Padilla, 1995, p. 542). Taylor and Olswang (1997) report that higher education has always historically been exclusionary and segregated. However, it is also argued that higher education provides an optimal opportunity to ameliorate or eradicate social inequality based on race/ethnicity (Mayo, Murguia, & Padilla, 1995; Taylor & Olswang, 1997). Therefore, racial/ethnic diversification in higher education, particularly at TWIs, has led to a proliferation of research on issues related to the racial/ethnic identity of college students and its relationship with self-esteem and self-efficacy (Mayo, Murguia, & Padillia, 1995; Negy, Shreve, Jensen, & Uddin, 2003).

Racial/ethnic identity is a complex construct reflecting various aspects of identification with, and membership in, a racial/ethnic group (Cuellar, Nyberg, Maldonado, & Roberts, 1997). According to Phinney (1992), racial/ethnic identity involves self-identification as a group member, attitudes and evaluations in relation to one's group, attitudes about oneself as a group member, extent of racial/ethnic knowledge and commitment, and racial/ethnic behaviors and practices. Racial/ethnic identity can change over time and vary across individuals and be conceptualized on a continuum from low to high (Cuellar, Nyberg, Maldonado, & Roberts, 1997). Racial/ethnic identity and related attitudes and behaviors influence the ways in which individuals conduct their lives, interact with people from other groups, and view society as a whole (Phinney, 1996).

Ford, Harris, and Schuerger (1993) maintain that racial/ethnic identity must be explored with gifted students of color. It is purported that how these students feel about their racial/ethnic heritage is critical to both their self-esteem and self-efficacy. Students who do not hold positive racial/ethnic identities may be especially vulnerable to negative peer pressures; they may also equate achievement with "acting white" or "selling out" (Fordham, 1988), which contributes to low effort and, thus, low achievement. Specifically, Lindstrom and Van Sant (1986) reported that many gifted students of color must choose between need for achievement and need for affiliation. These students often succumb to social pressures so that need for affiliation outweighs need for achievement. An external locus of control also hinders minority students' achievement. Students who attribute their outcomes to external factors, such as discrimination, may put forth less effort than those who attribute outcomes to internal factors, such as effort and ability (Ford, 1996; Fordham, 1988). Students of color who do not believe in the achievement ideology, who believe that glass ceilings and injustices will hinder their achievement, are not likely to work to their potential in school and have lower self-esteem and self-efficacy.

Self-esteem Issues in Development

Further research also supports that racial/ethnic identity is critical to the self-esteem and self-efficacy of individuals (Phinney, 1992; Phinney, 1996). For example, Goodstein & Ponterotto (1997) found that higher racial/ethnic identity was associated with higher self-esteem in African Americans. In a study of racial/ethnic identity, ethnicity, and gender on adolescent well-being, Martinez and Dukes (1997) found that higher levels of racial/ethnic identity were associated with higher levels of self-esteem,

purpose in life, and self-confidence with Whites, Native Americans, Blacks, Hispanics, and Asians. The positive relationship between a strong racial/ethnic identity and self-esteem was found in meta-analysis conducted by Bat-Chava and Steen (as cited in Phinney, Cantu, & Kurtz, 1997). The Bat-Chava and Steen study demonstrated a modest but consistent relationship between racial/ethnic identity and self-esteem.

Collective self-esteem is defined as the quality of a person's evaluation of himself or herself as a member of a particular racial/ethnic group (Luhtanen & Crocker, 1992). For students of color who are more collectivist in nature and place value on connectedness to others , high levels of collective self-esteem have been found to be associated with other indicators of healthy adjustment such as positive mental health (Zea, Reisen, & Poppen, 1999) and personal self-esteem (Lay & Verkuyten, 1999). Therefore, higher levels of a student of color's collective self-esteem might be associated with perceptions that his or her racial/ethnic group is positively regarded by White society as well as their own racial/ethnic group members. Conversely, a student of color's racial/ethnic collective self-esteem might be adversely affected by consistent perceptions of negative and demeaning race-related messages about their racial or ethnic group.

Self-efficacy Issues in Development

Self-efficacy is reflected in one's belief in one's ability to complete certain tasks successfully to obtain a specific outcome (Bandura, 1986). Self-efficacy has been shown to contribute significantly to student achievement (Coleman, Gallagher, & Foster, 1994; Ford, 1995; Shade, 1994). Specifically, self-efficacy has been shown to be a powerful predictor of academic persistence for African American (Gloria et al., 1999), Chicana/Chicano (Gloria, 1993; Solberg, O'Brien, Villareal, Kenner, & Davis, 1993),

Asian (Tsai, Ying, & Lee, 2001) and American Indian undergraduates (Rindone, 1988). However, specifically how racial/ethnic identity and self-efficacy affect decision making and the development of racial/racial minorities is not clearly delineated (Gloria & Hird, 1999; Hackett & Byars, 1996). It is suggested that counselors, counseling psychologists, and educators examine how racial/ethnic identity and other salient racial/ethnic related constructs influence the self-efficacy and development of students of color (Gloria & Hird, 1999; Hackett & Byars, 1996). Helms and Piper (1994) report that to best understand how issues related to racial/ethnic identity affect self-efficacy, the influence of racial/ethnic identity and perceived barriers should be explored.

There have been a multitude of studies on factors that influence the development of college students in general. This study specifically investigated the development of high achieving undergraduates of color. The life-skills development, racial/ethnic identity, self-esteem, and self-efficacy of these students were examined. Gender and race/ethnicity will be the variables examined. Previous studies on the development of high achieving students have found that gender patterns and preferences do exist but have not been identified as clear gender differences. (Baxter Magolda, 1992; Lease 2002). This study examined gender as a variable to ascertain if clear differences exist within the representative sample of high achieving students of color. Research on undergraduates of color, particularly high achieving students, stress the importance of the relationship between high levels of racial/ethnic identity, self-esteem, and self-efficacy (Phinney, 1996; Roberts, et al., 1999; Steward, Gimenez, Jackson, 1995). This study aimed to investigate if differences exist based on race/ethnicity on life-skills development racial/ethnic identity, self-esteem, and self-efficacy. Furthermore, this study examined

whether a relationship exists between life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. Critical messages these students received from primary caregivers related to their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy was also explored.

CHAPTER 3

METHODOLOGY

This chapter provides information on sample size, description of the sample, instrumentation, research design, data collection procedures, and data analysis for this study.

Description of the Sample

Participants for this study were 57 undergraduate students who were members of the Center for Undergraduate Research Opportunities - Apprentice Program (CURO-AP) at The University of Georgia (UGA) for at least two semesters during their freshman and sophomore years and are currently UGA students. Participants were limited to those enrolled in the program from August 2002 to the present. Prior to 2002, the program was under the leadership of a different director; and the components of the program were qualitatively different.

Participants ranged in age from 18 to 22 years of age. Forty-four percent were 18 years old, nineteen percent were 19 years old, sixteen percent were 20 years old, nineteen percent were 21 years old and two percent 22 years of age. The majority of participants were first year students (45%). Nineteen percent of the participants were second year students. Eighteen percent of the population were third and fourth year students. Thirty-three percent of the participants were male and sixty-seven percent were females. Thirty-five percent of the participants were Black (African, African American, Afro-Caribbean), thirty-three percent of the participants were Asian (Asian American, Indian, Chinese, Pakistani, Filipino), nine percent were Hispanic/Latina/o (Cuban, Spanish), twelve percent were Caucasian (American, Italian), and eleven percent were Biracial/Multiracial

(African/African-American and Caucasian, Hispanic and Caucasian). Ninety percent of the population were citizens of the United States.

The CURO-AP was established in 1994 with an overall mission to improve retention and enrich the academic experience of undergraduate students, particularly students of color and students from historically underrepresented populations, during their first and second years at The University of Georgia (CURO-AP Handbook, 2004). This program is supported by the Office of the Senior Vice President for Academic Affairs and Provost, The University of Georgia Graduate School, the Biomedical and Health Sciences Institute, and the National Science Foundation.

The program consists of the following ten goals : (1) to engage first- and second-year students in academic research and exposure to the University research community, (2) to provide students with hands-on research experience in a field of their interest (3) to facilitate successful research partnerships that are mutually beneficial to the student and the faculty sponsor, (4) to create a community of undergraduate student researchers at The University of Georgia, (5) to increase students' identification with the mission of The University of Georgia: research, teaching, and service, (6) to train student advisors skilled in program design and implementation, academic counseling, conflict resolution, crisis management, and working with a diverse population of students, (7) to develop creative and rewarding program activities for all students enrolled in the program, (8) to foster development of a community of student researchers by providing educational enrichment activities and ways for students to interact, network, socialize, and collaborate together, (9) to improve the retention and graduation rates of undergraduate students, including historically underrepresented student groups at UGA, and (10) to promote and expand

opportunities for undergraduate research throughout a student's undergraduate years (CURO-AP Handbook, 2004).

The CURO-AP admissions process is highly competitive and selective. Approximately 10 – 15 students are admitted to the program each year out of an average applicant pool of 100 students. Selections are made by the CURO-AP Advisory Board, which consists of the Dean of the Graduate School, Director of the Honors Program, Director of Recruitment and Retention of the Graduate School, Associate Director and Coordinator for Outreach of Biomedical and Health Sciences Institute, Associate Provost of the Office of Institutional Diversity, a professor of Counseling Psychology and a professor of Physics and Astronomy. Students are selected based on their high school grade point average, SAT and/or ACT scores, community service, future academic and career aspirations, and personal essay. The average high school GPA of an incoming student is 3.8 and SAT score is 1400. CURO-AP participation is similar to taking a 3 credit hour class or having a part-time job. CURO-AP students work an average of 10-12 hours per week for an entire academic year. In addition, participants register for a 1 credit hour research seminar that meets weekly during the academic year. Apprentices receive a stipend of $1,000 per year for their participation.

Instrumentation

The instruments for this study were selected to assess specific demographic variables, life-skills development, self-esteem, self-efficacy, racial/ethnic variables, and messages given to students by primary caregivers. Instrumentation included the following: (a) The Life-Skills Inventory-College Form (LSI-CF) (Picklesimer & Gazda,

1996); (b) The Collective Self-Esteem Scale-Race Specific Version (CSES) (Crocker, Luhtanen, Blaine, & Broadnax, 1994); (c) The Generalized Self-Efficacy Scale (GSE) (Schwarzer & Jerusalem, 1995); (d) Multigroup Ethnic Identity Measure (MEIM) (Roberts et al., 1999); (e) The Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965); (f) Messages from Primary Caregiver(s) Questionnaire (Packer, 2005); (g) Center for Undergraduate Research Opportunities Apprentice Program Survey (Packer, 2004) and; (h) a Demographic Questionnaire.

The Life-Skills Inventory-College Form (LSI-CF)

The Life-Skills Inventory-College Form (LSDI-CF) (Picklesimer & Gazda, 1996) is an 88-item self-report instrument designed to assess college students' life-skills. The LSI-CF is based on seven human development theoretical constructs: (a) psychosocial (b) physical-sexual (c) vocational (d) cognitive (e) ego (f) moral and (g) affective (Gazda, 1989). Picklesimer and Gazda (1996) designed this instrument for clinical as well as research purposes. The LSI-CF can be used to predict possible future areas of skill deficit that traditional college students may encounter. The LSI-CF is a measure of nonpathological, or normal functioning. The reliability coefficient for the instrument is .93 (Picklesimer, 1991). (See Appendix A).

The LSI-CF consists of four areas of generic life skills:

1. Interpersonal Communications/Human Relations Skills (IPC/HR). These skills relate to personal psychosocial development. This category includes those skills necessary for effective communication, small and large group and community membership and participation, management of interpersonal intimacy, clear

expression of ideas and opinions, and giving and receiving feedback (Taylor, 1991). The reliability coefficient for the IPC/HR is .80 (Picklesimer, 1991).

2. Problem-Solving/Decision-Making Skills (PS/DM). These skills relate to information seeking, information assessment and analysis skills, problem identification, solution implementation and evaluation, goal setting, systematic planning and forecasting skills, time management, critical thinking, and conflict resolution skills (Taylor, 1991). The reliability coefficient for the PS/DM is .82 (Picklesimer, 1991).
3. Physical Fitness/Health Maintenance Skills (PF/HM). These skills relate to those abilities necessary for motor development and coordination, nutritional maintenance, weight control, physical fitness, athletic participation, physiological aspects of sexuality, stress management, and selection of leisure activity (Taylor, 1991). The reliability coefficient for the PF/HM is .80 (Picklesimer, 1991).
4. Identity Development/Purpose in Life Skills (ID/PIL). These skills relate to the development of personal values, self-esteem emotional expression, capacity for interpersonal intimacy, career direction, and a sense of place and purpose in life (Taylor, 1991). The reliability coefficient for the ID/PIL is .82 (Picklesimer, 1991).

The Collective Self-Esteem Scale-Race Specific Version (CSES-R)

The Collective Self-Esteem Scale (CSES) (Crocker, Luhtanen, Blaine, & Broadnax, 1994) consists of 16-items measured on a 7-point Likert-type scale. It asks respondents to consider their perceptions and feelings related to social group memberships that they possess based on ascribed characteristics such as sex, race,

religion, and ethnicity. The CSES has 4 subscales: a) Membership Collective Esteem which assesses an individual's judgments of how worthy they are as members of their social groups; b) Private Collective Self-Esteem that measures personal judgments of how good one's social groups are; c) Public Collective Self Esteem that assesses one's perceptions of how positively other people evaluate one's social groups; and d) Importance to Identity that assesses the importance of one's social group memberships to one's self-concept.

The Race-specific CSES-R is a modified version of CSES. Instead of assessing one's level of esteem related to social group membership, items are re-worded to ask respondents to consider their race in response to each item. For example, the item "I feel good about the social groups I belong to" would be modified to "I feel good about the race I belong to." A high score indicates high levels of self-esteem. A score as high as 112 is possible. The lowest possible score is 16. In the research conducted by Luhtanen and Crocker (1992), Cronbach's alpha coefficients were found to be substantial ranging from 0.83 to 0.88 for all scales. (See instrument in Appendix B).

The Generalized Self-Efficacy Scale (GSE)

The Generalized Self-Efficacy Scale (GSE) (Schwarzer & Jerusalem, 1995) scale was created to assess a general sense of perceived self-efficacy with the aim of predicting one's ability to cope with daily hassles as well as adaptation after experiencing stressful life events.

The construct of perceived self-efficacy reflects an optimistic self-belief (Schwarzer, 1992). This is the belief that one can perform novel or difficult tasks, or cope with adversity -- in various domains of human functioning. Perceived self-efficacy

facilitates goal setting, effort investment, persistence in the face of barriers and recovery from setbacks. It can be regarded as a positive resistance resource factor. Ten items are designed to tap this construct. Each item refers to successful coping and implies an internal-stable attribution of success. Perceived self-efficacy is an operative construct (i.e., it is related to subsequent behavior); and, therefore, it is relevant for clinical practice and behavior change.

In samples from 23 nations, Cronbach's alphas ranged from .76 to .90, with the majority in the high .80s (Schwarzer & Jerusalem, 1995). Criterion-related validity is documented in numerous correlation studies where perceived self-efficacy was positively correlated with favorable emotions, dispositional optimism, and work satisfaction. Perceived self-efficacy was negatively correlated with depression, anxiety, stress, burnout, and health complaints. In studies with cardiac patients, their recovery over a half-year time period could be predicted by pre-surgery self-efficacy (Jerusalem & Schwarzer, 1992). (See Appendix C).

Multigroup Ethnic Identity Measure (MEIM)

The Multigroup Ethnic Identity Measure (MEIM) (Roberts et al., 1999) is a 15-item instrument used to assess the degree of identification with one's ethnic group, regardless of the ethnic group. Respondents indicate their level of agreement to statements using a 5-point scale with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The MEIM has two subscales: a) Ethnic Identity Search and b)Affirmation, Belonging, and Commitment. The Ethnic Identity Search subscale contains five items. The Affirmation, Belonging, and Commitment subscale contains seven items. The remaining 3 items of the full scale inquire about the ethnicity of the

participant, the participant's mother, and the participant's father. For the purposes of this study, the two subscales (12 items) were used. Obtaining a mean score from the 12 items creates an ethnic identity score. Scores can range from 1 (low ethnic identity) to 5 (high ethnic identity).

The MEIM has been used in many studies using different ethnic group samples and ages and has consistently shown reliability with alphas above .80 (Phinney, 1992). In particular, the overall reliability coefficient of the scale is reported as .81 for a high school sample and .90 for a college sample (Phinney, 1992). In addition, the internal consistency of the 12-item MEIM has yielded Cronbach's alphas ranging from .81 to .89 (Roberts et al., 1999), with the Cronbach's alpha for the African American sample .82. (See Appendix D).

The Rosenberg Self-Esteem Scale (RSES)

The Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965) is a 10-item scale which consists of positive and negative self-appraisal statements rated on a 4-point scale ranging from strongly agree to strongly disagree. Scores range from 10 to 40 with higher scores reflecting low self-esteem. The original sample for which the scale was developed in the 1960s consisted of 5,024 high school juniors and seniors from 10 randomly selected schools in New York State and was scored as a Guttman scale. The scale generally has high reliability: test-retest correlations are typically in the range of .82 to .88, and Cronbach's alpha for various samples are in the range of .77 to .88. Studies have demonstrated both a unidimensional and a two-factor (self-confidence and self-deprecation) structure to the scale. (See Appendix E).

Messages from Primary Caregiver(s) Questionnaire

The Messages from Primary Caregiver(s) Questionnaire (Packer, 2005) consists of 13 sentence completions. This instrument was developed by the researcher to identify messages that students of color received from their primary caregiver(s) regarding life-skills and maintaining psychological well-being. (See Appendix F).

Center for Undergraduate Research Opportunities Apprentice Program Survey (Packer, 2004)

This 57-item questionnaire was developed by the researcher as a program evaluation and to measure the relationship among participation in the Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP) at The University of Georgia and academic self-efficacy, research self-efficacy, career preparedness, retention, and identification with the university. These data were not the focus of the current research project and were not included as part of the current research project. (See Appendix G).

Demographic Questionnaire

The 20-item Demographic Questionnaire (Packer, 2004) was developed by the researcher to obtain information from the participants on the educational background of their parent(s), family background, and socioeconomic status of the participants. In addition, participants were asked to provide their age, race/ethnicity, student classification, citizenship status, highest educational level and occupations of their mother and father, family income, academic major, description of their high school (i.e., public or private and racial makeup of the school), previous experience conducting research in high school, participation in a honors program (or equivalent in high school),

and neighborhood where raised (socioeconomic status of the community). Information regarding participants' Scholastic Aptitude Test and/or American College Test overall score, current overall grade point average, and status in The University of Georgia Honors Program were obtained from the CURO-AP Director. (See Appendix H).

Research Design

The present study employed a passive research design (Cook & Campbell, 1979). This design has been extensively used in social science research (Heppner, Kivlighan, & Wampold, 1999). One of the benefits of using this design is that participants are taken directly from the population of interest resulting in good external validity. Another benefit is in the use of self reports. In using self reports, the researcher can "access phenomena that would otherwise be extremely difficult and impossible to measure" (e.g., racial/ethnic identity) (Heppner et al., 1999, p. 304).

Due to the lack of randomization of the sample and no manipulation of the independent variables, this design may have low internal validity (Heppner et al., 1999). There is also a threat to the construct validity of putative causes and affect due to evaluation apprehension (Heppner et al., 1999). This threat is due to the possibility of participants responding to make themselves appear healthier than they are. There is also a threat to external validity due to the lack of generalizability across settings and persons (Heppner et al., 1999). Because participants were recruited from a traditionally White, southeastern university, the results may not generalize to institutions that are more diverse and/or located elsewhere.

The constant comparative method was used to analyze the qualitative data in this study. The constant comparative method is an inductive process for developing a master list of concepts or categories from the data collected in a study. The continuous process of examining individual units to developing classifications eventually reflects patterns in the data, which are organized into categories in this study (Heppner, et al., 1999). The responses to the open-ended sentences were read, and the researcher developed descriptive themes. The participants' responses were then assigned to themes on the basis of similarities in the findings. In this process of open coding, these themes were identified to designate various significant aspects of the data.

The second process of coding involved another round of sorting according to relationships among the original themes. The data were reorganized into fewer more meaningful themes until the themes were saturated. In total there were 741 responses collected from a total of 13 open ended sentences. The three strongest themes that emerged for each open-ended sentence were used in the study.

Procedures

Recruitment of Participants

During the fall 2005 semester, participants were recruited from the Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP) at The University of Georgia. Students were identified by the CURO-AP Director and Graduate Assistant. The purpose of the project was explained to potential participants during their weekly research seminar by the CURO-AP Director and Graduate Assistant. Interested students were asked to sign up to participate. Fifty-seven out of 67 eligible students participated in the study.

Data Collection

Data were collected during the fall semester of 2005 from students in the CURO-AP during their weekly research seminar. Data were collected three different times during the fall 2005 semester. All participating first and second year students were in attendance. Third and fourth year students were given three opportunities to complete the research packet during the weekly seminar. The Graduate Assistant of the CURO-AP assisted in the distribution of information about the research project. The CURO-AP graduate assistant also assisted in the distribution and collection of research packets. Research packets were completed by all participants during the research seminar. It took approximately 40 minutes for participants to complete the research packet. Appendix I contains the Participant Consent Form. A script provided by the researcher was read by the Graduate Assistant before participants engaged in the study. Appendix J contains the script.

Data Analysis

Research Question 1: *Are there differences based on gender on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?*

Null Hypotheses:

1. There will be no statistically significant differences based on gender on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).
2. There will be no statistically significant differences based on gender on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

3. There will be no statistically significant differences based on gender on racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).
4. There will be no statistically significant differences based on gender on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).
5. There will be no statistically significant differences based on gender on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

Statistical Analysis: A Pearson Product correlation coefficient was calculated to measure the relationship between gender and scores on the measures of life-skills development, ethnic/racial identity, self-esteem, and self-efficacy.

Research Question 2: *Are there differences based on race/ethnicity on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?*

Null Hypotheses:

1. There will be no statistically significant differences based on race/ethnicity on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).
2. There will be no statistically significant differences based on race/ethnicity on ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).

3. There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).
4. There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).
5. There will be no statistically significant differences based on race/ethnicity on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

Statistical Analysis: One-way ANOVAs were calculated to measure the relationship between race/ethnicity and scores on the measures of racial/ethnic identity, self-esteem, and self-efficacy. Pearson Product correlation coefficients were calculated to measure the relationships between race/ethnicity for each racial/ethnic group in the study and scores on the measures of racial/ethnic identity, self-esteem, and self-efficacy for each racial/ethnic group in the study.

Research Question 3: *What is the relationship among life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduate students of color?*

Null Hypothesis:

1. There will be no statistically significant relationship among scores on the Life-Skills Inventory – College Form (Picklesimer & Gazda, 1996) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965), The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994),

The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) or the Multigroup Ethnic Identity Measure (Roberts et al., 1999).

Statistical Analysis: A Pearson Product correlation coefficient was calculated to measure the relationship between the life-skills total score and subscale scores on the measures of racial/ethnic identity, self-esteem, and self-efficacy.

Research Question 4: *What are some of the messages given to high achieving undergraduate students of color from their primary caregivers that influence their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy?*

Analysis: The constant comparative method was used to analyze the qualitative data in this study. The responses to the open-ended sentences were read, and the researcher developed descriptive themes. The participants' responses were then assigned to themes on the basis of similarities in the findings. The three strongest themes that emerged for each open-ended sentence were used in the study.

CHAPTER 4

RESULTS

The current study investigated the life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in high achieving undergraduates of color participating in the CURO-AP. This chapter reports detailed information on the procedures and results of the analyses conducted for this study.

Demographic Data

Eighty-five percent of the students participating in CURO-AP from 2002-2006 are represented in the study. Fifty-seven undergraduate students who were members of the Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP) at The University of Georgia (UGA) for at least two semesters during their freshman and sophomore years and are currently UGA students participated in the study. Participants ranged in age from 18 to 22. The majority of the participants were 18 years of age (44%) and were first year students (46%). Nineteen of the participants were male (33%) and thirty-eight were female (67%).

Students from diverse racial/ethnic backgrounds participated in the study. Thirty-five percent of the participants were Black (African, African American, Afro-Caribbean), thirty-three percent were Asian and/or Asian American (Indian, Chinese, Pakistani, Filipino), nine percent were Hispanic or Latina/o (Cuban, Spanish), twelve percent were Caucasian (American, Italian), and eleven percent were Biracial or Multiracial (African/African-American and Caucasian, Hispanic and Caucasian). The majority of the participants were citizens of the United States (90%).

The majority of the participants (56%) reported that they attended a high school where less than 10% of the student body was the same racial/ethnic background as them. Most participants (86%) did not participate in research activities in high school. All but two participants took honors courses in high school. Seventy-two percent are currently in the UGA honors program. The mean SAT score of participants was 1354, and the mean college grade point average was 3.58.

The majority of the participants have parents that are well-educated with thirty - five percent of fathers and thirty-one percent of mothers graduating from a four-year college or university. Twenty-eight percent of both fathers and mothers earned a graduate/professional degree. Twelve percent of fathers and seven percent of mothers earned a doctoral or medical degree. Thirty-nine percent of participants report coming from homes where the family income exceeded $100,000. Detailed demographic characteristics of the total sample can be found in Table 4.1

Table 4.1

Demographic Characteristics of Total Sample

Variable	n	P
Student Status		
First Year	26	45.6
Second Year	11	19.3
Third Year	10	17.5
Fourth Year	10	17.5
Age		
18	25	43.9
19	11	19.3
20	9	15.8
21	11	19.3
22	1	1.8
Gender		
Male	19	33.3
Female	38	66.7
Race/Ethnicity		
Black	20	35.1
Asian	19	33.3
Hispanic	5	8.8
Caucasian	7	12.3
Biracial/Multiracial	6	10.5

Table 4.1 continued

Variable	n	P
Citizenship		
Citizen of U.S.	51	89.5
U.S. Immigrant	6	10.5
Education of Father		
Less than High School	2	3.5
High School	6	10.5
2 year degree	6	10.5
4 year degree	20	35.1
Graduate/Professional Degree	16	28.1
Doctorate/Medical Degree	7	12.3
Education of Mother		
Less than High School	0	0
High School	9	15.8
2 year degree	10	17.5
4 year degree	18	31.6
Graduate/Professional Degree	16	28.1
Doctorate/Medical Degree	4	7.0

Table 4.1 continued

Variable	n	P
Family Income		
10,000 – 19,000	2	3.5
20,000 - 29,000	5	8.8
30,000 – 39,000	4	7.0
40,000 – 49,000	6	10.5
Over 50,000	17	29.8
Over 100,000	22	38.6
Don't Know	1	1.8
Percent of Students of the Same Racial Background in High School		
10% or less	32	56.1
11 – 25%	5	8.8
26 – 50%	10	17.5
51 – 75%	6	10.5
76 – 100%	4	7.0
Participated in Research Activities in High School		
Yes	8	14
No	49	86
Participated in Honors Program in High School		
Yes	55	96.5
No	2	3.5

Table 4.1 continued

Variable	n	P
Participate in UGA Honors Program		
Yes	41	71.9
No	16	28.1

Note. N = 57

Preliminary Statistical Analyses

Descriptive Statistics

Life-Skills Descriptive Statistics

Life-skills scores were derived by summing and averaging all items for each subscale to yield four subscale mean scores (Picklesimer & Gazda, 1996). Mean scores for Interpersonal Communication/Human Relation Skills, Problem-Solving/Decision-Making Skills, Physical Fitness/Health Maintenance Skills and Identity Development/Purpose in Life Skills were 2.17, 2.08, 2.06, and 2.17 respectively. Additional information is presented in Tables 4.2 through 4.2e.

Table 4.2

Descriptive Statistics for the Life-Skills Inventory – College Form

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.16	.36	2.0
Problem-Solving/Decision-Making Skills	2.07	.38	1.96
Physical Fitness/Health Maintenance Skills	2.05	.37	1.55
Identity Development/ Purpose in Life Skills	2.17	.40	2.20

Note. N=57.

Table 4.2a

Descriptive Statistics for the Life-Skills Inventory – College Form for Black Participants

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.27	.33	1.30
Problem-Solving/Decision-Making Skills	2.15	.20	.72
Physical Fitness/Health Maintenance Skills	2.23	.25	1.22
Identity Development/ Purpose in Life Skills	2.37	.24	.80

Note. N= 20.

Table 4.2b

Descriptive Statistics for the Life-Skills Inventory – College Form for Asian Participants

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.10	.39	1.72
Problem-Solving/Decision-Making Skills	1.99	.43	1.87
Physical Fitness/Health Maintenance Skills	1.98	.35	1.15
Identity Development/ Purpose in Life Skills	2.07	.39	1.65

Note. N= 19.

Table 4.2c

Descriptive Statistics for the Life-Skills Inventory – College Form for Hispanic Participants

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.19	.33	.85
Problem-Solving/Decision-Making Skills	2.05	.19	.48
Physical Fitness/Health Maintenance Skills	1.97	.19	.48
Identity Development/ Purpose in Life Skills	2.11	.12	.35

Note. N= 5.

Table 4.2d

Descriptive Statistics for the Life-Skills Inventory – College Form for Caucasian Participants

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.08	.46	1.25
Problem-Solving/Decision-Making Skills	2.17	.70	2.00
Physical Fitness/Health Maintenance Skills	2.08	.67	1.96
Identity Development/ Purpose in Life Skills	2.07	.74	2.10

Note. N=7.

Table 4.2e

Descriptive Statistics for the Life-Skills Inventory – College Form for Biracial/Multiracial Participants

Subscale	M	SD	R
Interpersonal Communication/ Human Relations Skills	2.13	.21	.55
Problem-Solving/Decision-Making Skills	1.04	.19	.48
Physical Fitness/Health Maintenance Skills	1.74	.21	.61
Identity Development/ Purpose in Life Skills	2.02	.24	.70

Note. N=6.

Collective Self-Esteem Descriptive Statistics

Collective self-esteem scores for each subscale were calculated by summing the ratings for each subscale (Crocker, Luhtanen, Blaine, & Broadnax, 1994). Scores for the Membership Collective Self-Esteem, Private Collective Self-Esteem, Public Collective Self-Esteem, and Importance to Identity subscales were 15.1, 19.9, 15.2, and 14.3 respectively. Additional information is presented in Tables 4.3 through 4.3e.

Table 4.3

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version

Subscale	M	SD	R
Membership Self-Esteem	15.15	2.22	12.0
Private Self-Esteem	19.90	3.03	16.25
Public Self-Esteem	15.28	4.86	16.25
Importance to Identity	14.26	5.60	19.50

Note. N = 57.

Table 4.3a

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version for Black Participants

Subscale	M	SD	R
Membership Self-Esteem	15.44	2.70	4.50
Private Self-Esteem	20.70	2.12	7.25
Public Self-Esteem	11.32	4.14	15.25
Importance to Identity	16.53	4.88	16.25

Note. N = 20.

Table 4.3b

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version for Asian Participants

Subscale	M	SD	R
Membership Self-Esteem	15.92	1.79	9.25
Private Self-Esteem	21.10	1.41	4.25
Public Self-Esteem	19.50	2.01	6.75
Importance to Identity	15.60	4.22	12.00

Note. N = 19.

Table 4.3c

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version for Hispanic Participants

Subscale	M	SD	R
Membership Self-Esteem	14.15	.92	2.00
Private Self-Esteem	19.25	2.46	5.50
Public Self-Esteem	11.95	3.01	6.50
Importance to Identity	11.40	5.16	13.00

Note. N = 5.

Table 4.3d

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version for Caucasian Participants

Subscale	M	SD	R
Membership Self-Esteem	14.11	2.25	6.00
Private Self-Esteem	16.50	4.79	14.00
Public Self-Esteem	18.92	2.14	6.25
Importance to Identity	6.46	4.56	13.00

Note. N = 7.

Table 4.3e

Descriptive Statistics for the Collective Self-Esteem Scale – Race Specific Version for Biracial/Multiracial Participants

Subscale	M	SD	R
Membership Self-Esteem	13.6	1.26	3.50
Private Self-Esteem	17.83	3.99	9.75
Public Self-Esteem	13.50	2.75	8.25
Importance to Identity	13.60	5.33	14.00

Note. N = 6.

Rosenberg Self-Esteem Descriptive Statistics

The Rosenberg self-esteem score was calculated by summing all items (Rosenberg, 1965). The mean Rosenberg self-esteem score was 32.28. Tables 4.4 through 4.4e present additional information.

Table 4.4

Descriptive Statistics for the Rosenberg Self-Esteem Scale

Scale	M	SD	R
Self-Esteem	32.28	6.26	28.0

Note. N = 57.

Table 4.4a

Descriptive Statistics for the Rosenberg Self-Esteem Scale for Black Participants

Scale	M	SD	R
Self-Esteem	33.40	7.56	28

Note. N = 20.

Table 4.4b

Descriptive Statistics for the Rosenberg Self-Esteem Scale for Asian Participants

Scale	M	SD	R
Self-Esteem	30.57	6.14	21

Note. N = 19.

Table 4.4c

Descriptive Statistics for the Rosenberg Self-Esteem Scale for Hispanic Participants

Scale	M	SD	R
Self-Esteem	33.00	2.44	6

Note. N = 5.

Table 4.4d

Descriptive Statistics for the Rosenberg Self-Esteem Scale Caucasian Participants

Scale	M	SD	R
Self-Esteem	36.71	3.45	10

Note. N = 7.

Table 4.4e

Descriptive Statistics for the Rosenberg Self-Esteem Scale for Biracial/Multiracial Participants

Scale	M	SD	R
Self-Esteem	30.66	3.82	10

Note. N = 6.

General Self-Efficacy Descriptive Statistics

The general self-efficacy score was calculated by summing all items (Jerusalem & Schwarzer, 1995). The mean general self-efficacy score was 33.87. Tables 4.5 through 4.5e present additional information.

Table 4.5

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE)

Scale	M	SD	R
GSE	33.87	3.77	14

Note. N = 57.

Table 4.5a

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE) for Black Participants

Scale	M	SD	R
GSE	33.95	4.00	14.00

Note. N = 20.

Table 4.5b

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE) for Asian Participants

Scale	M	SD	R
GSE	33.00	4.00	12

Note. N = 19.

Table 4.5c

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE) for Hispanic Participants

Scale	M	SD	R
GSE	36.00	2.73	5.00

Note. N = 5.

Table 4.5d

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE) for Caucasian Participants

Scale	M	SD	R
GSE	36.1	2.19	5

Note. N = 7.

Table 4.5e

Descriptive Statistics for the Generalized Self-Efficacy Scale (GSE) for Biracial/Multiracial Participants

Scale	M	SD	R
GSE	32.00	3.22	8.00

Note. N = 6.

Multigroup Ethnic Identity Descriptive Statistics

The multigroup ethnic identity scores for each subscale were calculated by summing and averaging all items for each subscale to yield two subscale mean scores and a total score (Roberts et al., 1999). Scores for the Ethnic Identity Search and Affirmation, Belonging, and Commitment subscales were 2.92 and 3.24 respectively. The mean Multigroup Ethnic Identity total score was 3.11. Additional information is presented in Tables 4.6 through 4.6e.

Table 4.6

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM)

Scale	M	SD	R
MEIM TOTAL	3.11	.64	2.58
Ethnic Identity Search	2.92	.70	2.80
Affirmation, Belonging, Commitment	3.24	.66	2.57

Note. N = 57.

Table 4.6a

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM) for Black Participants

Scale	M	SD	R
MEIM TOTAL	3.32	.54	1.92
Ethnic Identity Search	3.08	.57	1.80
Affirmation, Belonging, Commitment	3.57	.57	2.00

Note. N = 20.

Table 4.6b

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM) for Asian Participants

Scale	M	SD	R
MEIM TOTAL	3.38	.55	1.67
Ethnic Identity Search	3.27	.67	2.00
Affirmation, Belonging, Commitment	3.45	.52	1.43

Note. N = 19.

Table 4.6c

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM) for Hispanic Participants

Scale	M	SD	R
MEIM TOTAL	2.55	.69	1.75
Ethnic Identity Search	2.28	.65	1.60
Affirmation, Belonging, Commitment	2.74	.73	1.86

Note. N = 5.

Table 4.6d

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM) for Caucasian Participants

Scale	M	SD	R
MEIM TOTAL	2.63	.34	1.00
Ethnic Identity Search	2.37	.60	1.80
Affirmation, Belonging, Commitment	2.81	.49	1.29

Note. N = 7.

Table 4.6e

Descriptive Statistics for the Multigroup Ethnic Identity Measure (MEIM) for Biracial/Multiracial Participants

Scale	M	SD	R
MEIM TOTAL	2.55	.61	1.85
Ethnic Identity Search	2.46	.54	1.40
Affirmation, Belonging, Commitment	2.61	.70	2.14

Note. N = 6.

Quantitative Findings

Research Question 1: *Are there differences based on gender on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?*

Null Hypothesis 1: There will be no statistically significant differences based on gender on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).

Four Pearson Product-Moment correlation coefficient analyses were calculated to investigate whether statistically significant relationships exist between gender and life-skills development as measured by the four subscales of the life-skills inventory: (a) Interpersonal Communication/Human Relations Skills, (b) Problem-Solving/Decision-Making, (c) Physical Fitness/Health Maintenance Skills, and (d) Identity Development/Purpose in Life Skills. There was no statistically significant relationship found between gender and Interpersonal Communication/Human Relations Skills ($\underline{r}$ = -.054, $\underline{p}$ = .68), Problem Solving/Decision-Making Skills ($\underline{r}$ = .01, $\underline{p}$ = .94), Physical Fitness/Health Maintenance Skills ($\underline{r}$ = -.078, $\underline{p}$ = .56) or Identity Development /Purpose in Life Skills ($\underline{r}$ = .005, $\underline{p}$ = .96). These findings suggest that gender is not a significant factor in the development of any area of life-skills development. Based on these findings, the null hypothesis 1 for Research Question 1 is accepted. Additional information pertaining to the Pearson Product-Moment correlation coefficients can be found in Table 4.7.

Table 4.7

Correlation Coefficients Between Gender and the Dependent Variable Life-Skills

Variable	r	p	N
Interpersonal Communication/ Human Relations Skills	-.054	.68	57
Problem-Solving/Decision-Making Skills	.010	.94	57
Physical Fitness/Health Maintenance Skills	-.078	.56	56
Identity Development/Purpose in Life Skills	.005	.96	56

Null Hypothesis 2: There will be no statistically significant differences based on gender on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

A Pearson Product-Moment correlation coefficient analysis was calculated to investigate whether a statistically significant relationship exists between gender and self-esteem. There was no statistically significant relationship found between gender and self esteem ($r = -.112$, $p = .40$). Based on these findings, null hypothesis 2 was accepted for Research Question 1. Table 4.8 provides additional information pertaining to the Pearson Product-Moment correlation coefficients.

Table 4.8

Correlation Coefficients Between Gender and the Dependent Variable Self-Esteem

Variable	r	p	N
RSES	-.11	.40	57

Null Hypothesis 3: There will be no statistically significant differences based on gender on racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).

Three Pearson Product-Moment correlation coefficient analyses were calculated to investigate whether statistically significant relationships existed between gender and racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure total score and two subscales: (a) Ethnic Identity Search and (b) Affirmation, Belonging, and Commitment. Statistically significant relationships were not found between gender and the Multigroup Ethnic Identity Measure total score ($r = .04$, $p = .76$), the Ethnic Identity Search subscale ($r = .08$, $p = .54$), or the Affirmation, Belonging, and Commitment subscale ($r = .005$, $p = .96$). These findings suggest that gender has no significant relationship with racial/ethnic identity and therefore, null hypothesis 3 for Research Question 1 should be accepted. Additional information pertaining to the Pearson Product-Moment Correlation coefficients can be found in Table 4.9.

Table 4.9

Correlation Coefficients Between Gender and the Dependent Variable Racial/Ethnic Identity

Variable	r	p	N
MEIM TOTAL	.041	.76	57
Ethnic Identity Search	.081	.54	57
Affirmation, Belonging, Commitment	.005	.96	57

Null Hypothesis 4: There will be no statistically significant differences based on gender on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).

Four Pearson Product-Moment correlation coefficient analyses were calculated to investigate whether statistically significant relationships existed between gender and self-esteem as measured by the four subscales of The Collective Self-Esteem Scale-Race Specific Version: (a) Membership Collective Self-Esteem, (b) Private Collective Self-Esteem, (c) Public Self-Esteem, and Importance to Identity. Statistically significant relationships were not found between gender and the Membership Collective Self-Esteem subscale ($r = .19$, $p = .14$), the Private Collective Self-Esteem subscale ($r = .11$, $p = .41$), the Public Self-Esteem subscale ($r = -.06$, $p = .65$), and the Importance to Identity subscale ($r = .14$, $p = .28$). These findings indicate that gender is not significantly related to collective self-esteem. Therefore, the null hypothesis 4 for Research Question 1 is accepted. Table 4.10 contains additional information regarding the Pearson Product-Moment correlation coefficients.

Table 4.10

Correlation Coefficients Between Gender and Dependent Variable Collective Self-Esteem

Variable	r	p	N
Membership Self-Esteem	.19	.14	57
Private Self-Esteem	.11	.41	57
Public Self-Esteem	-.06	.65	57
Importance to Identity	.14	.28	57

Null Hypothesis 5: There will be no statistically significant differences based on gender on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

A Pearson Product-Moment correlation coefficient analysis was calculated to investigate whether a statistically significant relationship existed between gender and self-efficacy. Statistically significant relationships were not found between gender and self-efficacy ($r = .01$, $p = .92$). These findings indicate that gender is not significantly related to self-efficacy. Based on these findings, the null hypothesis 5 for Research Question 1 is accepted. Table 4.11 contains additional information regarding the Pearson Product-Moment correlation coefficients.

Table 4.11

Correlation Coefficients Between Gender and Dependent Variable Generalized Self-Efficacy

Variable	r	p	N
GSE	-.013	.92	57

Research Question 2: Are there differences based on race/ethnicity on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?

Null Hypothesis 1: There will be no statistically significant differences based on race/ethnicity on life-skills development as measured by the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996).

Four one-way analyses (ANOVAs) were calculated to measure differences based on race/ethnicity and life-skills development as measured by the four subscales of the life-skills inventory: (a) Interpersonal Communication/Human Relations Skills, (b) Problem-Solving/Decision-Making Skills, (c) Physical Fitness/Health Maintenance Skills, and (d) Identity Development/Purpose in Life Skills. Results indicate there was no statistically significant relationship found between race/ethnicity and Interpersonal Communication/Human Relations Skills $F(4,52)=.72$, $p=.58$, Problem-Solving/Decision-Making Skills $F(4,52)=.68$,$p=.60$ or Identity Development /Purpose in Life Skills $F(4,51)=1.94$, $p=.117$. A significant relationship was found between race/ethnicity and the Physical Fitness/Health Maintenance Skills subscale $F(4,51)=2.67$, $p=.04$. These findings suggest that race/ethnicity is not a significant factor in the development of life-skills pertaining to Interpersonal Communication/Human Relations Skills, Problem Solving/Decision-Making Skills or Identity Development/Purpose in Life Skills. However, an individual's race/ethnicity has an impact on life-skills development as measured by the Physical Fitness/Health Maintenance subscale. This may suggest that one's race/ethnicity influences the degree to which one acquires and practices skills necessary for nutritional maintenance, weight control, athletic participation, and stress management. Based on these findings, the null hypothesis 1 for Research Question 2 is rejected. Additional information pertaining to the ANOVAs is found in Table 4.12.

Table 4.12

Summary of ANOVAs between Race/Ethnicity and Life-Skills

	df	MS	F	p
Race/Ethnicity				
Interpersonal Communication/ Human Relations	4	.095	.720	.582
Within Groups	52	.132		
Total	56			
Problem-Solving/ Decision-Making	4	.104	.687	.604
Within Groups	52	.151		
Total	56			
Physical Fitness/ Health Maintenance	4	.329	2.673	.042
Within Groups	21	.123		
Total	55			
Identity Development/ Purpose in Life	4	.291	1.944	.117
Within Groups	51	.150		
Total	55			

Note. N=57.

Null Hypothesis 2: There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

A one-way ANOVA was calculated to investigate whether a statistically significant relationship exists between race/ethnicity and self-esteem. There was no statistically significant relationship found between race/ethnicity and self esteem as measured by the Rosenberg Self-Esteem Scale $F(4,52)=1.36$, $p=.259$. Based on these findings, null hypothesis 2 was accepted for Research Question 2. Table 4.13 provides additional information pertaining to the ANVOA.

Table 4.13

Summary of ANOVA between Race/Ethnicity and Self-Esteem

	df	MS	F	p
Race/Ethnicity				
Rosenberg Self-Esteem Scale	4	52.123	1.364	.259
Within Groups	52	38.212		
Total	56			

Note. N=57.

Null Hypothesis 3: There will be no statistically significant differences based on race/ethnicity on racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure (Roberts et al., 1999).

Three one-way ANOVAs were calculated to investigate whether statistically significant relationships existed between race/ethnicity and racial/ethnic identity as

measured by the Multigroup Ethnic Identity Measure total score and two subscales: (a) Ethnic Identity Search and (b) Affirmation, Belonging, and Commitment. Statistically significant relationships were found between race/ethnicity and the Multigroup Ethnic Identity Measure total score $F(4,52)=6.45$, $p=.00$, the Ethnic Identity Search subscale $F(4,52)=5.65$, $p=.001$, and the Affirmation, Belonging, and Commitment subscale $F(4,52)=5.75$, $p=.001$. These findings may suggest that the race/ethnicity of a participant influences the degree to which one socializes with one's own group members and participates in cultural traditions, as well as experiences positive feelings of attachment to one's group and a secure sense of racial/ethnic identity. Therefore, null hypothesis 3 for Research Question 2 should be rejected. Additional information pertaining to the ANOVAs can be found in Table 4.14.

Table 4.14

Summary of ANOVA between Race/Ethnicity and Racial/Ethnic Identity

	df	MS	F	p
Race/Ethnicity				
Multigroup Ethnic Identity Measure	4	1.924	6.465	.000
Within Groups	52	.298		
Total	56			
Ethnic Identity Search	4	2.133	5.658	.001
Within Groups	52	.377		
Total	56			

Table 4.14 continued

	df	MS	F	p
Affirmation, Belonging, Commitment	4	1.875	5.755	.001
Within Groups	52	.326		
Total	56			

Note. N=57.

Null Hypothesis 4: There will be no statistically significant differences based on race/ethnicity on self-esteem as measured by The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994).

Four one-way ANOVAs were calculated to investigate whether statistically significant relationships exist between race/ethnicity and self esteem as measured by the four subscales of The Collective Self-Esteem Scale-Race Specific Version: (a) Membership Collective Self-Esteem, (b) Private Collective Self-Esteem, (c) Public Collective Self-Esteem, and (d) Importance to Identity. No statistically significant relationship was found between race/ethnicity and the Membership Collective Self-Esteem subscale $F(4,52)=2.12$, $p=.09$. Statistically significant relationships were found between race/ethnicity and the Private Collective Self-Esteem subscale $F(4,52)=5.96$, $p=.00$, the Public Collective Self-Esteem subscale $F(4,52)=20.52$, $p=.00$, and the Importance to Identity subscale $F(4,52)=6.61$, $p=.00$. These findings indicate that an individual's race/ethnicity impacts his or her judgment of how worthy he or she is as a member of his or her social group, how good he or she believes one's social group is, and

the importance of his or her social group membership to his or her self-concept. These findings also indicate that race/ethnicity has an influence on one's perceptions of how positively other people evaluate one's social group. Based on these findings, the null hypothesis 4 for Research Question 2 is rejected. Table 4.15 contains additional information regarding the ANOVAs.

Table 4.15

Summary of ANOVAs between Race/Ethnicity and Collective Self-Esteem

	df	MS	F	p
Race/Ethnicity				
Membership Collective Self-Esteem	4	9.760	2.124	.091
Within Groups	52	4.595		
Total	56			
Private Collective Self-Esteem	4	40.469	5.968	.000
Within Groups	52	6.781		
Total	56			
Public Collective Self-Esteem	4	202.944	20.515	.000
Within Groups	52	9.892		
Total	56			

Table 4.15 continued

	df	MS	F	p
Importance to Identity	4	148.481	6.617	.000
Within Groups	52	22.440		
Total	56			

Note. N=57.

Null Hypothesis 5: There will be no statistically significant differences based on race/ethnicity on self-efficacy as measured by The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

A one-way ANOVA was calculated to investigate whether a statistically significant relationship exists between race/ethnicity and self-efficacy. Statistically significant relationships were not found between race/ethnicity and self-efficacy $F(4,52)=1.78$, $p=.14$. These findings indicate that race/ethnicity is not significantly related to self-efficacy. Based on these findings, the null hypothesis 5 for Research Question 2 is accepted. Table 4.16 contains additional information regarding the ANOVA findings.

Table 4.16

Summary of ANOVA between Race/Ethnicity and Generalized Self-Efficacy

	df	MS	F	p
Race/Ethnicity				
Generalized Self-Efficacy Scale	4	24.079	1.784	.146
Within Groups	52	13.497		
Total	56			

Note. N=57.

Research Question 3: *What is the relationship among life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduate students of color?*

Null Hypothesis 1: There will be no statistically significant relationship among scores on the Life-Skills Inventory-College Form (Picklesimer & Gazda, 1996) the Rosenberg Self-Esteem Scale (Rosenberg, 1965), The Collective Self-Esteem Scale-Race Specific Version (Crocker, Luhtanen, Blaine, & Broadnax, 1994), The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) or the Multigroup Ethnic Identity Measure (Roberts et al., 1999).

Thirteen Pearson Product-Moment correlation coefficient analyses were calculated for the total sample and for each of the five racial/ethnic groups represented in the sample to investigate whether statistically significant relationships existed between the subscales of the Life-Skills Inventory-College Form, the Rosenberg Self-Esteem

Scale, The Collective Self-Esteem Scale-Race Specific Version, Multigroup Ethnic Identity Measure, and the Generalized Self-Efficacy Scale.

There were positive significant relationships found between the Interpersonal Communication/Human Relations Skills subscale of the Life-Skills Inventory and the Membership Self-Esteem subscale of the Collective Self-Esteem Scale (r = .35, p = .007), the Multigroup Ethnic Identity Measure total score (r = .33, p = .012), the Multigroup Ethnic Identity Ethnic Identity Search subscale (r = .28, p = .032), the Multigroup Ethnic Identity Affirmation, Belonging, and Commitment subscale (r = .33, p = .011) and the Generalized Self-Efficacy Scale (r = .30, p = .022). This finding suggests that those life-skills related to psychosocial development (e.g., effective communication, small and large group and community membership and participation) are related to socializing with one's racial/ethnic group members, participation in cultural traditions, feelings of attachment to one's group, and having a secure knowledge of who one is as a member of a racial/ethnic group, and believing in one's abilities.

Positive statistically significant relationships were also found between the Problem-Solving/Decision-Making Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Ethnic Identity Search subscale (r = .29, p = .024), the Multigroup Ethnic Identity Affirmation, Belonging, and Commitment subscale (r = .30, p = .023) and the Generalized Self-Efficacy Scale (r = .43, p = .001). These findings suggest that life-skills related to information seeking, problem identification and conflict resolution skills have a positive influence on ethnic identity and belief in one's self to achieve particular performance outcomes.

There were positive statistically significant relationships found between the Physical Fitness/Health Maintenance Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score (r = .44, p = .001), the Multigroup Ethnic Identity - Ethnic Identity Search subscale (r = .43, p = .001), the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale (r = .40, p = .002), and the Generalized Self-Efficacy Scale (r = .51, p = .000). These findings suggest that those life-skills necessary for nutritional maintenance, weight control, physical fitness, and stress management are related to the degree to which an individual socializes with and feels attached to one's racial/ethnic group, as well as the belief that one can cope with adversity.

There were statistically significant relationships found between the Identity Development/Purpose in Life Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score (r = .38, p = .004), the Multigroup Ethnic Identity - Ethnic Identity Search subscale (r = .34, p = .008), the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale (r = .37, p = .005), and the Generalized Self-Efficacy scale (r = .478, p = .000). These findings suggest that life-skills related to the development of personal values, self-esteem, and a sense of place and purpose in life are positively influenced by one's racial/ethnic identity and optimistic self-belief.

Statistically significant positive correlations were also found between the Membership Collective Self-Esteem subscale of the Collective Self-Esteem Scale the Multigroup Ethnic Identity Measure total score (r = .61, p = .000), the Multigroup Ethnic Identity Ethnic Identity Search subscale (r = .59, p = .000), and the Multigroup Ethnic

Identity Affirmation, Belonging, and Commitment subscale (r = .57, p = .000). These findings suggest that the extent to which individuals believe they are good members of their racial/ethnic group is positively influenced by their racial/ethnic identity.

A statistically significant negative correlation was found between the Membership Self-Esteem subscale of the Collective Self-Esteem Scale and the Rosenberg Self-Esteem Scale (r = -.29, p = .027). This finding suggests that the degree to which participants believe they are good members of their racial/ethnic group negatively influences self-esteem. The Public Self-Esteem subscale of the Collective Self-Esteem Scale had a statistically significant positive relationship with the Multigroup Ethnic Identity Measure total score (r = .63, p = .000), the Multigroup Ethnic Identity Ethnic Identity Search subscale (r = .44, p = .001), and the Multigroup Ethnic Identity Affirmation, Belonging, and Commitment subscale (r = .72, p = .000). This finding suggests that the extent to which participants believe others view their racial/ethnic group positively influences their racial/ethnic identity. A positive statistically significant correlation between the Rosenberg Self-Esteem Scale and Generalized Self-Efficacy Scale was indicated (r = .45, p = .000). This finding indicates that one's general feeling of self-worth positively influences his/her optimistic beliefs about his/herself.

Based on these findings, the null hypothesis was rejected for Research Question 3. Additional information pertaining to the Pearson Product-Moment Correlation coefficients for the total sample can be found in Table 4.17a and 4.17b.

Table 4.17a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Total Sample

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	.353**	.217	.171	.199
Public Self-Esteem	-.122	-.085	.189	.230
Private Self-Esteem	.192	.099	-.171	.016
Importance to Identity	.152	.022	.193	.469**
MEIM	.332*	.317*	.210	-.293*
Ethnic Identity Search	.285*	.298*	.382*	.616**
Affirmation, Belonging, Commitment	.336*	.300*	.591**	.446**
Rosenberg Self-Esteem	.074	.250	.575**	.725**
Generalized Self-Efficacy	.303*	.439**	.026	.067

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.17b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Total Sample

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	.616**	.040	.639**	.660**	.198
Ethnic Identity Search	.591**	.064	.446**	.633**	.155
Affirmation, Belonging, Commitment	.575**	.019	.725**	.617**	.211
Rosenberg Self-Esteem	-.293*	.087	-.090	-.031	.453**
Generalized Self-Efficacy	.026	.073	.067	.006	

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

Blacks

For Blacks (African, African American, Afro-Caribbean), positive statistically significant relationships were found between the Life-Skills Inventory Interpersonal Communications/Human Relations Skills subscale and the Multigroup Ethnic Identity Measure total score ($\underline{r}$ = .49, $\underline{p}$ = .028), the Multigroup Ethnic Identity - Ethnic Identity Search subscale ($\underline{r}$ = .45, $\underline{p}$ = .044), and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale ($\underline{r}$ = .47, $\underline{p}$ = .036). Positive statistically significant relationships were also found between the Problem-Solving/Decision-Making Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score ($\underline{r}$ = .44, $\underline{p}$ = .028). These findings suggest that for Black participants, life-skills

related to personal psychosocial development and problem-solving and decision-making are correlated with the extent to which they have a positive racial/ethnic identity.

There were positive statistically significant relationships found between the Physical Fitness/Health Maintenance Skills subscale and the Multigroup Ethnic Identity Measure total score ($r = .54$, $p = .013$), the Multigroup Ethnic Identity - Ethnic Identity Search subscale ($r = .45$, $p = .044$), the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale ($r = .56$, $p = .10$), the Private Collective Self-Esteem subscale of the Collective Self-Esteem measure ($r = .53$, $p = .015$), and the Generalized Self-Efficacy Scale ($r = .68$, $p = .001$). These findings suggest that for Black participants, life-skills related to physical fitness, stress management and safety are positive influenced by their racial/ethnic identity, the extent to which they feel positively about being Black, and their overall optimistic self-belief.

Positive statistically significant relationships were also found between the Identity Development/Purpose in Life Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score ($r = .61$, $p = .006$), the Multigroup Ethnic Identity - Ethnic Identity Search subscale ($r = .49$, $p = .03$), the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale ($r = .82$, $p = .000$), the Private Collective Self-Esteem subscale of the Collective Self-Esteem measure ($r = .64$, $p = .003$) and the Generalized Self-Efficacy scale ($r = .821$, $p = .000$). These findings suggest that for Blacks in this study, life-skills necessary for the development of personal values, self-esteem, and career direction is influenced by their racial/ethnic identity, the internal value they give to their race/ethnicity and the degree to which they believe they can perform a given task or cope with adversity.

The Multigroup Ethnic Identity total score was positively and statistically significantly correlated with the Membership Collective Self-Esteem subscale of the Collective Self-Esteem Scale (r = .68, p = .001), the Private Collective Self-Esteem subscale of the Collective Self-Esteem Scale (r = .73, p = .000), the Importance to Identity subscale of the Collective Self-Esteem Scale (r = .61, p = .004), and the Generalized Self-Efficacy Scale (r = .74, p = .000). These findings suggest that the racial/ethnic identity of Black participants is influenced by the extent to which they believe they are good members of their race/ethnicity, the extent to which they feel positively about Blacks, and the degree to which they view being Black as an important part of how they perceive themselves.

Statistically significant positive relationships were also found between the Importance to Identity subscale of the Collective Self-Esteem Scale and the Multigroup Ethnic Identity - Ethnic Identity Search subscale (r = .54, p = .013), and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale (r = .60, p = .005). These findings suggest that the degree to which Black participants view being Black as an essential part of their overall identity is related to the extent to which they feel racial/ethnic pride and have secure knowledge of who they are as a Black person.

There were also positive statistically significant relationships found between Generalized Self-Efficacy and the Private Collective Self-Esteem subscale of the Collective Self-Esteem Scale (r = .68, p = .001), and the Importance to Identity subscale of the Collective Self-Esteem Scale (r = .487, p = .029). These findings suggest that an optimistic self-belief in one's abilities is related to the extent to which Black participants

feel positive about their race/ethnicity and the degree to which they view being Black as important to their identity.

Additional information pertaining to the Pearson Product-Moment correlation coefficients of Black participants can be found in Table 4.18a and 4.18b.

Table 4.18a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for the Black Participants

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	.436	.121	.076	.250
Public Self-Esteem	-.102	-.230	.194	.191
Private Self-Esteem	.315	.324	.537*	.640**
Importance to Identity	.239	.116	.177	.322
MEIM	.490*	.446*	.546*	.610**
Ethnic Identity Search	.455*	.399	.455*	.498*
Affirmation, Belonging, Commitment	.471	.440	.562**	.649**
Rosenberg Self-Esteem	-.211	.062	.024	.137
Generalized Self-Efficacy	.322	.360	.684**	.821**

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01
IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.18b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Black Participants

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	.687**	.080	.734**	.611**	.741**
Ethnic Identity Search	.705**	.004	.638**	.546*	.487
Affirmation, Belonging, Commitment	.611**	.128	.736**	.603**	.764**
Rosenberg Self-Esteem	-.400	.277	-.121	.272	.249
Generalized Self-Efficacy	.261	.251	.684**	.487*	

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01.

Asians

For Asians (Indian, Chinese, Pakistani, Filipino) positive statistically significant relationships were found between the Life-Skills Inventory Interpersonal Communications/Human Relations Skills subscale and the Private Collective Self-Esteem subscale of the Collective Self-Esteem Scale ($\underline{r}$ = .49, $\underline{p}$ = .032) and the Generalized Self-Efficacy Scale ($\underline{r}$ = .504, $\underline{p}$ = .28). These findings suggest that for Asian participants, life-skills necessary for effective communication and small and large group and community membership and participation are related to the degree to which they view being Asian as important to their identity.

The Problem-Solving/Decision-Making Skills subscale of the Life-Skills Inventory was found to be positively statistically correlated with the Private Collective

Self-Esteem subscale of the Collective Self-Esteem Scale (r = .56, p = .012), the Affirmation, Belonging, and Commitment subscale of the Multigroup Ethnic Identity Measure (r = .46, p = .047). These findings suggest that life-skills pertaining to critical thinking and conflict resolution skills are related to racial/ethnic pride and an optimistic belief in one's abilities.

There was a positive statistically significant relationship found between the Physical Fitness/Health Maintenance Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score (r = .55, p = .017), the Ethnic Identity Search subscale of the Multigroup Ethnic Identity Measure (r = .58, p = .01), and the Generalized Self-Efficacy Scale (r = .58, p = .01). These findings suggest that generalized self-efficacy and a positive racial/ethnic identity are related to life-skills pertaining to nutritional maintenance, physical fitness and stress management for Asian participants.

A statically significant relationship was also found between the Identity Development/Purpose in Life Skills subscale of the Life-Skills Inventory and the Private Collective Self-Esteem subscale of the Collective Self-Esteem Scale (r = .54, p = .015), the Affirmation, Belonging, and Commitment subscale of the Multigroup Ethnic Identity Measure (r = . 52, p = .02), and the Generalized Self-Efficacy Scale (r = .62, p = .005).

These findings suggest that life-skills related to the development of personal values, self-esteem, emotional expression, and a sense of place and purpose in life are related to feelings of attachment to other Asians and participation in Asian traditions, as well as, one's optimistic belief in his/her capabilities.

There was a statistically significant relationship found between the Generalized Self-Efficacy Scale and the Rosenberg Self-Esteem Scale (r = .67, p = .001) and the Private Collective Self-Esteem subscale of the Collective Self-Esteem Scale (r = .50, p = .026). These findings suggest that there is a relationship between an optimistic self-belief, feelings of self-worth and self-value, and the internal value that Asian participants ascribe to their racial/ethnic group.

The Importance to Identity subscale of the Collective Self-Esteem Scale was found to be statistically and significantly correlated with the Multigroup Ethnic Identity Measure total score (r = .63, p = .00) the Multigroup Ethnic Identity Measure's Ethnic Identity Search subscale (r = .62, p = .005), and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale (r = .58, p = .008). These findings suggest that there is a relationship between the degree to which Asian participants view being Asian as an important part of how they perceive themselves and the extent to which they feel a sense of attachment and express a commitment to their racial/ethnic group.

Additional information pertaining to the Pearson Product-Moment correlation coefficients of Asian participants can be found in Tables 4.19a and 4.19b.

Table 4.19a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Asian Participants

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	.227	.194	.298	.041
Public Self-Esteem	-.228	-.133	.257	-.087
Private Self-Esteem	.494*	.561*	.354	.548*
Importance to Identity	-.027	.024	.229	-.015
MEIM	.318	.412	.553*	.438
Ethnic Identity Search	.177	.318	.589*	.297
Affirmation, Belonging, Commitment	.418	.461*	.466	.528*
Rosenberg Self-Esteem	.142	.257	.124	.318
Generalized Self-Efficacy	.504*	.644*	.587*	.621**

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.19b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Asian Participants

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	.346	-.115	.158	.634**	.371
Ethnic Identity Search	.396	-.029	.039	.621**	.323
Affirmation, Belonging, Commitment	.269	-.185	.253	.589**	.381
Rosenberg Self-Esteem	-.288	.277	.255	.045	.678**
Generalized Self-Efficacy	-.006	.081	.509*	.236	

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01.

Hispanics

For Hispanics (Latinos/as, Cuban, Spanish) statistically significant relationships were found between the Public Self-Esteem subscale of the Collective Self-Esteem Scale and the Interpersonal Communication/Human Relations Skills subscale of the Life-Skills Inventory ($\underline{r}$ = .99, $\underline{p}$ = .002) and the Rosenberg Self-Esteem Scale ($\underline{r}$ = - .967, $\underline{p}$ = .033). These findings suggest that the degree to which Hispanic participants believe that others perceive their racial/ethnic group positively is related to life-skills necessary for personal psychosocial development.

The Private Self-Esteem subscale of the Collective Self-Esteem Scale was found to be statistically and significantly correlated with the Multigroup Ethnic Identity Measure's Ethnic Identity Search subscale ($\underline{r}$ = .98, $\underline{p}$ = .017). These findings suggest

that the extent to which Hispanic participants feel positively about Hispanics is related to how securely they know who they are as a Hispanic person.

There were statistically significant relationships found between the Importance to Identity subscale of the Collective Self-Esteem Scale and the Multigroup Ethnic Identity Measure total score ($r = .97$, $p = .021$) the Multigroup Ethnic Identity Measure's Ethnic Identity Search subscale ($r = .95$, $p = .049$), and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale ($r = .97$, $p = .022$). These findings suggest that the Identity Collective Self-Esteem of Hispanic participants is positively influenced by the degree to which they socialize with other Hispanics, participant in Hispanic cultural traditions, and have a sense of understanding regarding who they are as a member of their racial/ethnic group.

Additional information pertaining to the Pearson Product-Moment Correlation coefficients of Hispanic participants can be found in Table 4.20a and 4.20b.

Table 4.20a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Hispanic Participants

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	-.832	.527	-.917	.492
Public Self-Esteem	.998**	-.070	.813	-.798
Private Self-Esteem	.027	.793	.540	.139
Importance to Identity	.140	.450	.661	-.195
MEIM	-.054	.526	.505	.000
Ethnic Identity Search	-.037	.683	.512	.097
Affirmation, Belonging, Commitment	-.063	.427	.492	-.055
Rosenberg Self-Esteem	-.948	-.089	-.725	.622
Generalized Self-Efficacy	-.192	.845	-.152	.704

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.20b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Hispanic Participants

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	-.352	-.091	.927	.979*	.000
Ethnic Identity Search	-.436	-.062	.983*	.951*	.192
Affirmation, Belonging, Commitment	-.297	-.106	.879	.978*	-.110
Rosenberg Self-Esteem	.851	-.967*	-.014	.010	-.105
Generalized Self-Efficacy	-.219	-.138	.345	-.097	

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01.

Caucasians

For Caucasians, statistically significant relationships were found between the Interpersonal Communication/Human Relations Skills subscale of the Life-Skills Inventory and the Public Self-Esteem subscale of the Collective Self-Esteem Scale ($\underline{r}$ = .72, $\underline{p}$ = .044) and the Membership Self-Esteem subscale of the Collective Self-Esteem Scale ($\underline{r}$ = .83, $\underline{p}$ =.01). These findings suggest that for Caucasian participants, life-skills related to effective communication and small and large group and community membership and participation are related to the extent to which they believe they are good members of their racial/ethnic group and the degree to which they believe that others view Caucasians positively.

The Problem-Solving/Decision-Making Skills subscale of the Life Skills Inventory was statistically and significantly correlated with the Public Self-Esteem subscale of the Collective Self-Esteem Scale ($r = .72$, $p = .044$) and the Multigroup Ethnic Identity Measure's Ethnic Identity Search subscale ($r = .71$, $p = .048$). A statistically significant relationship was also found between the Multigroup Ethnic Identity Measure and the Public Self-Esteem subscale of the Collective Self-Esteem Scale ($r = .79$, $p = .02$). These findings suggest that those life-skills related to information seeking, problem identification, goal setting, critical thinking and conflict resolution skills are related to the degree to which Caucasian participants believe that others perceive their racial/ethnic group positively, as well as, the degree to which they have a secure knowledge of who they are as a member of their racial/ethnic group.

Additional information pertaining to the Pearson Product-Moment correlation coefficients of Caucasian participants can be found in Table 4.21a and 4.21b.

Table 4.21a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Caucasian Participants

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	.836**	.655	.293	.430
Public Self-Esteem	.720*	.720*	.392	.303
Private Self-Esteem	.084	-.089	-.108	-.073
Importance to Identity	.309	.075	-.033	.306
MEIM	.650	.660	.510	.364
Ethnic Identity Search	.618	.711*	.661	.579
Affirmation, Belonging, Commitment	.460	.402	.223	.075
Rosenberg Self-Esteem	.251	.434	.319	-.010
Generalized Self-Efficacy	.142	.288	.233	.341

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.21b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Caucasian Participants

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	.563	.790*	.275	.092	-.428
Ethnic Identity Search	.258	.423	-.330	.047	-.065
Affirmation, Belonging, Commitment	.616	.816*	.659	.097	-.571
Rosenberg Self-Esteem	.030	.611	-.255	-.793	.299
Generalized Self-Efficacy	-.157	-.091	-.639	-.408	

Note. * $\underline{p} < .05$ ** $\underline{p} < .01$.

Biracial/Multiracial

For Biracial/Multiracial participants, a statistically significant relationship was found between the Identity Development/Purpose in Life Skills subscale of the Life-Skills Inventory and the Rosenberg Self-Esteem Scale ($\underline{r} = .83$, $\underline{p} = .041$). These findings suggest that for Biracial/Multiracial participants, those life-skills related to the development of personal values, emotional expression, career direction, and a sense of place and purpose in life are positively influenced by self-esteem.

A statistically significant relationship was found between the Multigroup Ethnic Identity Measure total score and the Private Self-Esteem subscale of the Collective Self-Esteem Scale ($\underline{r} = .88$, $\underline{p} = .02$). This finding suggests that racial/ethnic identity for

Biracial/ Multiracial participants is influenced by the extent to which they feel positively about the racial/ethnic groups to which they belong.

The Multigroup Ethnic Identity Measure - Ethnic Identity Search subscale was significantly and statistically correlated with the Membership Self-Esteem subscale of the Collective Self-Esteem Scale ($r = .85$, $p = .032$). This finding suggests a relationship between the degree to which Biracial/Multiracial participants feel committed and knowledgeable of who they are as members of their racial/ethnic groups and the extend to which they believe they are good members of their racial/ethnic racial groups.

A statistically significant relationship was also found between the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale and the Private Self-Esteem subscale of the Collective Self-Esteem Scale ($r = .90$, $p = .015$). These findings suggest that racial/ethnic pride expressed by Biracial/Multiracial participants is related to the extent to which they feel positive about the racial/ethnic groups to which they belong.

Additional information pertaining to the Pearson Product-Moment correlation coefficients of Biracial/Multiracial participants can be found in Tables 4.22a and 4.22b.

Table 4.23 provides a summary of the findings for the quantitative research questions and null hypotheses.

Table 4.22a

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Biracial/Multracial Participants

Variable	IPC/HR	PS/DM	PF/HM	ID/PIL
Membership Self-Esteem	-.324	.120	-.522	-.279
Public Self-Esteem	-.119	-.796	-.412	-.210
Private Self-Esteem	-.146	.024	-.654	.053
Importance to Identity	-.223	.373	-.119	-.212
MEIM	-.450	-.210	-.697	-.148
Ethnic Identity Search	-.441	-.177	-.599	-.368
Affirmation, Belonging, Commitment	-.422	-.214	-.700	-.016
Rosenberg Self-Esteem	.728	.591	.248	.830*
Generalized Self-Efficacy	.743	.192	.470	.474

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01

IPC/HR Interpersonal Communication/Human Relations Skills
PS/DM Problem-Solving/Decision-Making Skills
PF/HM Physical Fitness/Health Maintenance Skills
ID/PIL Identity Development/Purpose in Life

Table 4.22b

Pearson Product Moment Correlation Coefficients Among Scores on All Measures for Biracial/Multracial Participants

Variable	Membership Self-Esteem	Public Self-Esteem	Private Self-Esteem	Importance to Identity	Generalized Self-Efficacy
MEIM	.785	-.086	.882*	.549	-.304
Ethnic Identity Search	.851*	-.235	.734	.741	-.272
Affirmation, Belonging, Commitment	.692	.002	.900*	.404	-.300
Rosenberg Self-Esteem	.055	-.155	.423	.000	.583
Generalized Self-Efficacy	-.541	.293	-.299	-.427	

Note. * $\underline{p}$ <.05 ** $\underline{p}$ < .01.

Table 4.23

Summary of Findings for the Quantitative Research Questions and Null Hypotheses

Research Questions	Findings
1. Null Hypothesis1	Accepted
Null Hypothesis 2	Accepted
Null Hypothesis 3	Accepted
Null Hypothesis 4	Accepted
Null Hypothesis 5	Accepted
2. Null Hypothesis 1	Rejected
(significant difference based on race/ethnicity on life-skills development was found)	
Null Hypothesis 2	Accepted
Null Hypothesis 3	Rejected
(significant difference based on race/ethnicity on racial/ethnic identity was found)	
Null Hypothesis 4	Rejected
(significant difference based on race/ethnicity on self-esteem was found)	
Null Hypothesis 5	Accepted
3. Null Hypothesis 1	Rejected
(significant relationship among scores on all measures was found)	

Qualitative Findings

This portion of the research project employed a qualitative approach. Although qualitative research has a long history in education and related fields, its application in psychology remains relatively new. Due to the population involved, along with the measures currently available to address the influences on the areas of interest for this project (life-skills development, racial/ethnic identity, self-esteem, and self-efficacy), it is the belief of the researcher that the quantitative approach alone is not able to fully capture the rich messages given to the participants by primary caregivers that have had a substantial influence on their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy.

The constant comparative method (Glaser, 1978) was used to analyze the qualitative responses provided on the Messages from Primary Caregivers Questionnaire (see Appendix F). In this method, the goal of the researcher is to "generate an emergent set of categories and their properties which fit, work and are relevant for integrating into a theory" (Glaser, 1978, p. 56). To do this, the analyst begins with "open coding, which is coding the data in every way possible" (Glaser, 1978, p.56). The three strongest themes that emerged for each open-ended sentence were used in the study. While few differences were found in responses on the Messages from Primary Caregivers Questionnaire based on race/ethnicity and/or gender, differences that did appear are also reported in the results. The results are reported in the language of the participants. The three strongest themes for each open-ended sentence can be found in Table 4.24.

Research Question 4: *What are some of the messages given to high achieving undergraduate students of color from their primary caregivers that influence their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy?*

Participants reported that as college students, their primary caregivers taught them that participating fully in their educational process is the most important part of their lives right now. A college education was also viewed as an essential necessity in reaching one's dreams and obtaining financial stability. According to the responses, participants learned that an education is fundamental to self-improvement. Participants shared that their primary caregivers gave them the message that a good education is key to having a happy life, learning more about your self, and becoming a better person. Similar messages regarding education were found across all racial/ethnic and gender lines.

Primary caregivers taught the participants that having a career is an important part of one's identity and well-being. Participants report being given the message that having a career means more than just having a job. Participants were taught that a career should be based on your interests, what one finds pleasure in doing, and what one does well. Having an established career is viewed as necessary for maintaining a preferred standard of living. Black and Asian student responses shared a theme regarding the importance of family. Black and Asian participants report that their primary caregivers taught them that having an established career is important to one's ability to provide for their family. The primary caregivers of Black and Asian students also gave the message that while establishing a successful career is important, it is not more important than family. The women participants reported that their primary caregivers stressed the importance of having a career as a means of establishing financial independence. Caucasian women

specifically reported that having a career can be viewed as a personal choice and staying at home with children is also seen as a viable option for them.

The students in the study reported that their primary caregivers taught them that success is relative and should be viewed as an individualized concept. The students reported learning that success can mean different things to different people. Participants also reported learning that success is not always a priority and does not necessarily refer to financial gain. Success was also viewed as the result of hard work. Students reported that their primary caregivers shared that success is not something that comes easy, but is the direct result of reaching your aspired goals. Primary caregivers also informed participants that success is being able to provide for yourself and your family. Black and Asian students particularly reported being taught that having a loving family can also equal success.

Regarding being a member of their racial/ethnic group, participants were taught to never be ashamed of their racial/ethnic group. Black students specifically reported being taught that life would have more obstacles for them because of their race/ethnicity. The primary caregivers of Black students also taught them that they would need to work harder than others, particularly Caucasians. Ignoring racism and negative stereotypes about Blacks was also advised to Black students. Black participants were also instructed by their caregivers to always remember to give back to their community. Asian students specifically reported being taught to be proud of their group and its heritage and traditions. Primary caregivers of Hispanic students taught them that they are equally as important as other members of other racial groups and they should live like any other good hard working person should. Caucasian and Biracial/Multiracial participants

reported being taught the importance of being colorblind or not noticing the race of other people. They also reported rarely or never having conversations about racial matters. Few Caucasian participants reported being taught that they were generally superior to other racial/ethnic groups.

Messages regarding how to interact with and treat members of the opposite sex were also passed down to participants from their primary caregivers. For example, males report being taught to treat females with respect and as equals. Females reported that they were taught to remember to conduct themselves with respect if they want men to respect them. Women were also taught to be independent and to not depend on men for their survival. Being strong and striving for success were messages both men and women received. Specifically, men reported they were taught to be strong and to stand up for what they believe in. Women reported being given messages regarding staying strong, not giving up their dreams, and living up to their potential. Messages regarding having to work harder than men and the possibility of having to face more adversity than men were given specifically to women of color. Men reported that they were given the message that as men, they would need to be more responsible than women, particularly as the head of a household. Women reported that they were taught to be responsible by being careful around men and choosing appropriate partners for romantic relationships.

When asked what messages their primary caregivers gave them regarding how to interact with members of a different racial/ethnic group, participants of color report being taught the importance of being tolerant and respectful of others. These participants were particularly taught to have an open mind towards those of a different racial/ethnic group.

They were also taught to be respectful of the culture of others and to try to learn about different groups through their interactions with others. Caucasian and Biracial/Multiracial participants reported that if their parents talked to them about interacting with members of a different race/ethnicity at all, they were given the message that they should be colorblind by treating everyone the same and not acknowledging that others are of a different race/ethnicity than them. Some Caucasian participants were also cautioned by their caregivers to not forget where they came from and their own cultural values. These participants specifically report being taught to be careful regarding being negatively influenced by other racial/ethnic groups.

As academically talented students, participants received messages to work hard and challenge themselves. Primary caregivers also taught participants to do their best and not to give up when faced with difficulties. Primary caregivers also shared with the participants that their status as an academically talented student would grant them opportunities to be able to do anything they want in life. Participants also report being taught that they will be granted more opportunities than others to be successful. Because of their history of success as academically talented students, participants were given the message that they have a responsibility to use their talents wisely and to work to their full potential. Black students were specifically taught to remember to remain focused on their educational pursuits and to not get into any trouble that might jeopardize their academic futures.

When asked what messages their primary caregivers gave them regarding maintaining relationships, participants report being taught to being kind and respectful in relationships by being helpful, spending quality time with others, and being someone

people view as responsible and reliable. Being honest, true to oneself, and at times allowing yourself to be vulnerable were also noted as messages received by participants. Communicating one's thoughts and feelings to others was also given as advice regarding how to best maintain relationships with others.

Primary caregivers taught participants that it is important to express emotion as a way to promote emotional health and deal effectively with stress. Expressing emotions to others was also seen as a way to have clear communication with others and thus build stronger relationships. Participants report being encouraged to view the expression of emotion as acceptable and normal and not a sign of weakness. Primary caregivers gave the message that the expression of emotion can be a positive experience if done calmly and at an appropriate place and time.

It was also reported that primary caregivers shared messages on how to engage in self-care. Participants were taught that the best way to engage in self-care or take good care of themselves is to not engage in peer pressure and listen to themselves. Primary caregivers also instructed participants to maintain a healthy diet and to get adequate rest and relaxation in an effort to take good care of themselves as well as maintaining a regular exercise regimen is a good way to take care of themselves. Primary caregivers also suggested specifically to participants of color to remember their roots and what their parents taught them.

Primary caregivers also gave the participants advice regarding how to best handle difficult problems and/or deal with adversity. Participants report that they received messages on how to talk things through before making a decision. Participants were also discouraged from attempting to deal with a major problem all at once and to stay positive.

Male students reported that they were given messages regarding remaining logical during stressful situations. Females students were more likely to be given the message to remain calm and not get overly emotional when faced with a difficult problem. Asian students reported being taught to turn to their family in an effort to find solutions. Black students reported being taught to rely on their faith and to use prayer as methods of handling difficult problems and dealing with adversity.

Of all the messages given to them by their primary caregivers, participants reported that messages regarding the meaning of success, how to handle difficult problems and/or deal with adversity, and the importance of education currently influence their thoughts and behaviors the most. The majority of participants reported that they received messages related to life-skills development, racial/ethnic identity, self-esteem, and self-efficacy from both their mother and father. Black students were more likely to report having received messages from their mother only. Asian students reported that their grandparents were also influential in providing them with messages that currently influence their thoughts and behaviors.

Table 4.24

Qualitative Themes to Open-Ended Sentences

Item 1. My primary caregiver(s) taught me that education

1. Is the Most Important Part of My Life
2. Is Necessary for Success
3. Is Fundamental to Self-Improvement

Item 2. My primary caregiver(s) taught me that having a career

1. Is an Important Part of My Life
2. In Something I Love to Do is Critical
3. Will Provide Me with a Better Life

Item 3. My primary caregiver(s) taught me that success is

1. Relative
2. A Result of Hard Work
3. Being Able to Support Yourself and Your Family

Item 4. My primary caregiver(s) taught me that as a member of my racial/ethnic group

1. I Should Have Pride in My Racial/Ethnic Group
2. Life Will be More Difficult for Me
3. I Should be Colorblind

Item 5. My primary caregiver(s) taught me that as a man/woman

1. I Should Know How to Appropriately Interact with Members of the Opposite Sex
2. I Will Need to Be Strong
3. I Will Need to Be Responsible

Item 6. My primary caregiver(s) taught me that when interacting with members of a different racial/ethnic group

1. I Should be Tolerant and Respectful
2. I Should be Colorblind
3. I Should be Careful to Not Forget My Own Values

Item 7. My primary caregiver(s) taught me that as an academically talented student

1. I Should Work Hard and Do My Best
2. I Will Have Opportunities to Be Successful
3. I Have a Responsibility to Use My Talents Well

Item 8. My primary caregiver(s) taught me to maintain relationships by

1. Being Kind and Respectful
2. Being Honest
3. Communicating My Thoughts and Feelings and Listening

Table 4.24 Continued

Item 9. My primary caregiver(s) taught me that expressing emotion

1. Is Important for Emotional Health and Building Relationships
2. Is Acceptable and Normal
3. Should be Done Calmly

Item 10. My primary caregiver(s) taught me the best way to engage in self-care or take good care of myself is

1. To Not Engage in Peer Pressure
2. To Eat Right/Healthy
3. To Exercise Regularly

Item 11. My primary caregiver(s) taught me the best way to handle difficult problems and/or deal with adversity

1. Is to Think Things Through before Making a Decision
2. Is to Relax and Remain Calm
3. Is to Pray

Item 12. Of all the messages you listed above, which message currently influence your thoughts and behaviors the most?

1. The Message of the Meaning of Success
2. How to Handle Difficult Problems
3. The Importance of Education

Item 13. Who is/are your primary caregiver(s) who gave you these messages (i.e., mother, father, aunt, uncle, grandparent, sibling, etc.)?

1. Both Mother and Father
2. Mother only
3. Grandparents

CHAPTER 5

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to empirically investigate life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in high achieving undergraduates of color. Specifically, this study first explored differences based on gender and race/ethnicity on measures of life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. Secondly, the relationship among life-skills, racial/ethnic identity, self-esteem, and self-efficacy was investigated. Finally, some of the messages high achieving undergraduates of color receive from their primary caregivers related to life-skills development, racial/ethnic identity, self-esteem, and self-efficacy were explored.

The research questions that guided this study were: (a) Are there differences based on gender on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?; (b) Are there differences based on race/ethnicity on life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?; (c) What is the relationship among life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for high achieving undergraduates of color?; and (d) What are some of the messages given to high achieving undergraduate students of color from their primary caregivers that influence their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy?

The sample for this study consisted of 57 undergraduate students who were members of the Center for Undergraduate Research Opportunities Apprentice Program (CURO-AP) at The University of Georgia (UGA) for at least two semesters during their

freshman and sophomore years and attended UGA between the years 2002 to 2006. Participants ranged in age from 18 to 22. The majority of participants were 18 years of age (44%). The majority of participants were first year students (46%). Nineteen of the participants were male (33%) and thirty-eight were female (67%). Thirty-five percent of the participants were Black (African, Afro-Caribbean, or African American), thirty-three percent were Asian and/or Asian American, nine percent were Hispanic or Latina/o, twelve percent were Caucasian, and eleven percent were Biracial or Multiracial.

Four Pearson Product-Moment correlation coefficient analyses were calculated to investigate whether statistically significant relationships exist between gender and life-skills development as measured by the four subscales of the life-skills inventory: Interpersonal Communication/Human Relations Skills, Problem-Solving/Decision-Making, Physical Fitness/Health Maintenance Skills, and Identity Development/Purpose in Life Skills. There was no statistically significant relationship found between gender and Interpersonal Communication/Human Relations Skills, Problem- Solving/Decision-Making Skills, Physical Fitness/Health Maintenance Skills, or Identity Development/ Purpose in Life Skills.

A Person Product-Moment correlation coefficient analysis was calculated to investigate whether a statistically significant relationship exists between gender and self-esteem. There was no statistically significant relationship found between gender and self-esteem.

Three Pearson Product-Moment correlation coefficient analyses were calculated to investigate whether statistically significant relationships exist between gender and racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure total score

and two subscales: Ethnic Identity Search and Affirmation, Belonging, and Commitment. Statistically significant relationships were not found between gender and the Multigroup Ethnic Identity Measure total score, the Ethnic Identity Search subscale, or the Affirmation, Belonging, and Commitment subscale.

Four Pearson Product-Moment Correlation coefficient analyses were calculated to investigate whether statistically significant relationships exist between gender and self-esteem as measured by the four subscales of The Collective Self-Esteem Scale-Race Specific Version: (a) Membership Self-Esteem, (b) Private Collective Self-Esteem, (c) Public Self-Esteem, and (d) Importance to Identity. Statistically significant relationships were not found between gender and the Membership Self-Esteem subscale, the Private Collective Self-Esteem, the Public Self-Esteem subscale, and the Importance to Identity subscale.

A Person Product-Moment Correlation coefficient analysis was calculated to investigate whether a statistically significant relationship exists between gender and self-efficacy. Statistically significant relationships were not found between gender and self-efficacy.

Four one-way ANOVAs were calculated to investigate whether statistically significant relationships exist between race/ethnicity and life-skills development as measured by the four subscales of the life-skills inventory: (a) Interpersonal Communication/Human Relations Skills, (b) Problem-Solving/Decision-Making, (c) Physical Fitness/Health Maintenance Skills, and (d) Identity Development/Purpose in Life Skills. There was no statistically significant relationship found between race and Interpersonal Communication/Human Relations Skills, Problem Solving/Decision-

Making Skills, or Identity Development /Purpose in Life Skills. A significant relationship was found between race/ethnicity and the Physical Fitness/Health Maintenance Skills subscale.

A one-way ANOVA was calculated to investigate whether a statistically significant relationship exists between race/ethnicity and self-esteem. There was no statistically significant relationship found between race/ethnicity and self-esteem as measured by the Rosenberg Self-Esteem Scale.

Three one-way ANOVAs were calculated to investigate whether statistically significant relationships existed between race/ethnicity and racial/ethnic identity as measured by the Multigroup Ethnic Identity Measure total score and two subscales: (a) Ethnic Identity Search and (b) Affirmation, Belonging, and Commitment. Statistically significant relationships were found between race/ethnicity and the Multigroup Ethnic Identity Measure total score, the Ethnic Identity Search subscale, and the Affirmation, Belonging, and Commitment subscale.

Four one-way ANOVAs were calculated to investigate whether statistically significant relationships existed between race/ethnicity and self-esteem as measured by the four subscales of The Collective Self-Esteem Scale-Race Specific Version: (a) Membership Collective Self-Esteem, (b) Private Collective Self-Esteem, (c) Public Collective Self-Esteem, and (d) Importance to Identity. Statistically significant relationships were found between race/ethnicity and the Membership Collective Self-Esteem subscale, the Private Collective Self-Esteem subscale, and the Importance to Identity subscale.

A one-way ANOVA was calculated to investigate whether a statistically significant relationship exists between race/ethnicity and self-efficacy. Statistically significant relationships were not found between race/ethnicity and self-efficacy. These findings indicate that race/ethnicity is not significantly related to self-efficacy.

Thirteen Pearson Product-Moment correlation coefficient analyses were calculated for the total sample and for each of the five racial/ethnic groups represented in this sample to investigate whether statistically significant relationships existed between the subscales of the Life-Skills Inventory-College Form, the Rosenberg Self-Esteem Scale, The Collective Self-Esteem Scale-Race Specific Version, Multigroup Ethnic Identity Measure, and the Generalized Self-Efficacy Scale.

There were positive significant relationships found between the Interpersonal Communication/Human Relations Skills subscale of the Life-Skills Inventory and the Membership Self-Esteem subscale of the Collective Self-Esteem Scale, the Multigroup Ethnic Identity Measure total score, the Multigroup Ethnic Identity-Ethnic Identity Search subscale, the Multigroup Ethnic Identity-Affirmation, Belonging, and Commitment subscale, and the Generalized Self-Efficacy Scale. Positive statistically significant relationships were also found between the Problem-Solving/Decision-Making Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity - Ethnic Identity Search subscale, the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale, and the Generalized Self-Efficacy Scale. There were positive statistically significant relationships found between the Physical Fitness/Health Maintenance Skills subscale and the Multigroup Ethnic Identity Measure total score, the Multigroup Ethnic Identity - Ethnic Identity Search subscale, the Multigroup Ethnic

Identity - Affirmation, Belonging, and Commitment subscale, and the Generalized Self-Efficacy Scale. There were statistically significant relationships between the Identity Development/Purpose in Life Skills subscale of the Life-Skills Inventory and the Multigroup Ethnic Identity Measure total score, the Multigroup Ethnic Identity - Ethnic Identity Search subscale, the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale, and the Generalized Self-Efficacy scale. Statistically significant positive correlations were also found between the Membership Collective Self-Esteem subscale of the Collective Self-Esteem Scale the Multigroup Ethnic Identity Measure total score, the Multigroup Ethnic Identity - Ethnic Identity Search subscale, and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale. A statistically significant negative correlation was found between the Membership Self-Esteem subscale of the Collective Self-Esteem Scale and the Rosenberg Self-Esteem Scale. The Public Self-Esteem subscale of the Collective Self-Esteem Scale had a statistical significant positive relationship with the Multigroup Ethnic Identity Measure total score, the Multigroup Ethnic Identity - Ethnic Identity Search subscale, and the Multigroup Ethnic Identity - Affirmation, Belonging, and Commitment subscale. A positive statistically significant correlation between the Rosenberg Self-Esteem Scale and Generalized Self-Efficacy Scale was indicated.

The qualitative component of the study, which consisted of data from 13 open-ended sentences, was analyzed using the constant comparative method of qualitative analysis to assess the messages given to high achieving undergraduate students of color from their primary caregivers that influence their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. The qualitative data suggest that the three

messages that currently influence the thoughts and behaviors of the participants the most are messages regarding: (a) the meaning of success, (b) how to handle difficult problems, and (c) the importance of education.

Conclusions and Discussions

The current study focused on the life-skills development, racial/ethnic identity, self-esteem, and self-efficacy of high achieving undergraduates of color.

Findings Regarding Gender and Life-Skills Development (Research Question 1)

The Pearson Product-Moment correlation coefficient analysis indicated that no significant difference exists based on gender and life-skills development. One possible explanation for the failure to find a significant relationship between gender and life-skills development is that with high-achieving students both males and females are as equally prepared to attain the skills related to the four dimensions of life-skills development: (a) Problem-Solving/Decision-Making, (b) Physical Fitness/Health Maintenance, (c) Interpersonal Communication/Human Relations, and (d) Identity Development/Purpose in Life Skills.

Honora (2002) reports that families shape the goals and expectations of higher achieving students. Higher achieving students are more likely to use family members as role models for future educational career aspirations. The majority of participants in this study have parents that are well-educated with thirty-five percent of fathers and thirty-two percent of mothers having graduated from a four-year college or university, and twenty-three percent of fathers and twenty percent of mothers having earned a graduate/professional degree and/or doctoral/medical degree. Sixteen percent of fathers and mothers earned a graduate or professional degree. Seven percent of fathers and four

percent of mothers earned a doctorate or medical degree. High achieving students, regardless of gender are also more likely to have closer and more supportive family relationships that can foster the development of and model appropriate life-skills (Honora, 2002).

One possible limitation of the study is that the relationship between gender combined with race/ethnicity on life-skills development was not investigated. For example, the study did not examine whether specific relationships existed specifically between Black women, Asian women, Hispanic women, Caucasian women, or Biracial/Multiracial women on any of the four areas of life-skills development.

It is also important to note that the small sample size, with thirty-eight females and nineteen males, may also be a possible explanation for the failure to find a significant relationship between gender and life-skills development.

Findings Regarding Gender and Self-Esteem (Research Question 1)

The results of the Pearson Product-Moment correlation coefficient indicated that there was no statistically significant difference based on gender and self-esteem as measured by the Rosenberg Self-Esteem Scale.

The key to self-esteem is the amount of discrepancy between what a person desires and what the person believes he/she has achieved and the overall sense of support that person feels from people around him/her (Rosenberg, 1965). According to Bray (2006), having one's academic achievement meet one's academic expectations and desires is a major key to most college students' self-esteem. Previous research (Wiggins & Schatz, 1994) has indicated that self-esteem and academic achievement are positively correlated. Moeller (1994) specifically found that Honors students tend to demonstrate

higher academic self-esteem and competency. However, other researchers (Kaplan, 1990; Klein, 1996; Kline & Short, 1991) report that the constant striving to live up to self-expectations and those of others to be first, best, or both can be very stressful and lead to low self-esteem. Therefore, one possible explanation for the failure to find a significant relationship between gender and self-esteem in this study is that the pressure these high achieving students of color experience to excel accompanied by other concerns (e.g., feeling different, the "imposter syndrome", the need to prove their academic talent) may have resulted in additional stresses and negatively impacted their self-esteem.

Findings Regarding Gender and Racial/Ethnic Identity (Research Question 1)

The results of the Pearson Product-Moment correlation coefficient indicated that there is no statistically significant difference based on gender and racial/ethnic identity. One possible explanation for the failure to find a significant relationship between gender and racial/ethnic identity is that high-achieving males and females may identify more with being academically talented and/or with their areas of academic/career interests than their race/ethnic identity. Succeeding in school might also serve as a buffer against reacting to and/or identifying conditions of discrimination or privilege.

The qualitative findings revealed that some students adhere to a colorblind ideology which includes not seeing themselves as a racial/ethnic being. Another explanation is that the sample used in this study was relatively small and therefore, these findings should be interpreted with caution.

Findings Regarding Gender and Collective Self-Esteem (Research Question 1)

The results of the Pearson Product-Moment correlation coefficients indicated that there is no significant relationship between gender and collective self-esteem as measured

by the Collective Self-Esteem Scale – Race Specific Version. One possible explanation for the failure to find a significant relationship between gender and collective self-esteem is that the measure used to identify collective self-esteem was a race-specific version and not a gender-specific version. While little research has been conducted to investigate relationships between gender and scores on the Collective Self-Esteem Scale – Race Specific Version, research on the relationship between gender and the gender specific version of the measure indicate that gender is related to collective self-esteem. Specifically, women express a higher level of collective self-esteem than men (DeCremer, VanVugt, & Sharp, 1999).

Findings Regarding Gender and Self-Efficacy (Research Question 1)

The results of the Pearson Product-Moment correlation coefficients indicated that there is no relationship between gender and self-efficacy. According to Pajares (2002), the beliefs students develop about their academic capabilities help determine what they do with the knowledge and skills they have learned and can accomplish. It has been reported that the higher the sense of self-efficacy, the greater the effort, persistence, and resilience (Pajares, 2002). As a consequence, self-efficacy beliefs powerfully influence the level of accomplishment students ultimately achieve. Therefore, one possible explanation for the failure to find a relationship between gender and self-efficacy is that it is the academic performance and capabilities of these high achieving students that is more related to their self-efficacy than their gender.

Findings Regarding Race/Ethnicity and Life-Skills Development (Research Question 2)

Results of the one-way ANOVAs indicate that no relationship exists between racial/ethnicity and the Interpersonal Communications/Human Relations, Problem-

Solving/Decision-Making, or Identity Development/Purpose in Life subscales of the Life-Skills Inventory – College Form. However, a statistically significant relationship was found between race/ethnicity and the Physical Fitness/Health Maintenance Skills subscale. A possible explanation for the failure to find a significant relationship between race/ethnicity and the Interpersonal Communications/Human Relations, Problem-Solving/Decision-Making, or Identity Development/Purpose in Life subscales may be that skills related to personal psychosocial development, information seeking, problem solving, the development of personal values, career direction and a sense of place and purpose in life may be related more to the family influences and personal experiences which have led these students to be academically talented.

The results indicate that Black and Caucasian participants scored higher on the Physical Fitness/Health Maintenance Skills subscale than Asians, Hispanics, and Biracial/Multiracial participants. One explanation for the influence of race/ethnicity on the Physical Fitness/Health Maintenance subscale is that those skills necessary for motor development, coordination, nutritional maintenance, weight control, physical fitness, athletic participation, and stress management are more aligned with the cultural values of Blacks and Caucasians than the other racial/ethnic groups represented.

Findings Regarding Race/Ethnicity and Self-Esteem (Research Question 2)

Results of the one-way ANOVA indicate that no relationship exists between race/ethnicity and self-esteem. Other studies (Rowley, Sellers, Chavous, & Smith, 1998) have also found little evidence of a relationship between race/ethnicity and self-esteem. One consequence of the view of self-concept is that no one aspect of identity, such as race/ethnicity, should explain an overwhelming portion of the variance in self-esteem

(Rowley, Sellers, Chavous, & Smith, 1998). A possible explanation for the failure to find a significant relationship between race/ethnicity and self-esteem may be that students of color who report believing that they will face more barriers in their academic careers because of their race/ethnicity are likely to have lower self-esteem (Ford, 1996; Fordham, 1988).

Findings Regarding Race/Ethnicity and Racial/Ethnic Identity (Research Question 2)

Results of the one-way ANOVAs indicate that there is a statistically significant relationship between race/ethnicity and racial/ethnic identity. These findings suggest that the race/ethnicity of participants impacts racial/ethnic identity.

Black and Asian participants scored higher on all measures of the Multigroup Ethnic Identity Measure indicating a stronger racial/ethnic identity. Specifically, Black and Asian participants report socializing more with members of their own group, participating more in cultural traditions and having stronger positive feelings of attachment to their racial/ethnic group. One possible explanation for this may be that visible racial/ethnic minorities, such as Blacks and Asians, have a more secure sense of their racial ethnic identity than others who look like members of the majority group because they have experience in being aware that they are racially/ethnically different because of their facial characteristics and skin color. It is important to note that in the qualitative portion of the study, many of the Hispanics and Biracial/Multiracial participants reported that either their primary caregivers did not discuss issues of race/ethnicity or taught them that race/ethnicity should not be an important factor in their lives. Also, some Hispanic participants reported that many people were unaware of their Hispanic heritage.

Findings Regarding Race/Ethnicity and Collective Self-Esteem (Research Question 2)

Results of the one-way ANOVAs indicate that there is a statistically significant relationship between race/ethnicity and collective self-esteem. There was a statistically significant relationship between race/ethnicity and public collective self-esteem. Asian participants had the highest public collective self-esteem followed by Caucasians. Black participants had the lowest public collective self-esteem. One possible explanation for this is that Asians strongly believe their racial/ethnic group is perceived positively by others because Asian students are often viewed as "model minorities," successful, high achievers who other U.S. minorities should use as an example group to follow (Cheryan & Bodenhausen, 2000). Blacks on the other hand, have a long history of experiencing racism, discrimination, prejudice, and hate crimes in the U.S. because of their race/ethnicity that still continues today. This can be one explanation for why Black participants reported low Public Collective Self-Esteem.

There were statistically significant relationships between race/ethnicity and Membership Collective Self-Esteem, Private Collective Self-Esteem, and Importance to Identity Collective Self-Esteem subscales. Asians hold the highest membership and private collective self-esteem followed by Blacks. Caucasians and Biracial/Multiracial participants had the lowest scores on both subscales. One possible explanation is that Asian and Black high achieving students are more likely to feel that they are representing their racial/ethnic group well by succeeding academically and are proud to be members of their racial/ethnic group. Biracial/Multiracial students reported experiencing difficulty feeling like they belong to one racial/group. This may be one explanation for why the

extent to which they believe they are good members of a racial/ethnic group or feel positively about their racial/ethnic group is lower.

The results also indicate that Black students had the highest importance to identity collective self-esteem, while Caucasians had the lowest. One possible explanation for this is that race/ethnicity is a more important part of the identity of Black students. Because Caucasians are part of the majority culture, they are least likely to experience the same daily hassles as Blacks as a result of their race/ethnicity; and therefore, they may not have experiences that force them to think about the impact race/ethnicity has on their daily lives.

It is important to note that these results, which found significant findings particularly for Blacks and Asians, may be influenced by the fact that thirty-five percent of the sample was Black and thirty-three percent was Asian.

Findings Regarding Race/Ethnicity and Self-Efficacy (Research Question 2)

Results of the one-way ANOVA indicated that there is no statistically significant relationship between race/ethnicity and self-efficacy. Siegle and McCoach (2002) report four characteristics of academic achievers: self-efficacy, environmental perceptions, goal orientation, and self-regulation. Academic achievers are self-efficacious and have higher academic self-perceptions, and believe they have the ability to perform well (Bandura, 1986). Therefore, one possible explanation for the failure to find a statistically significant relationship between race/ethnicity and self-efficacy is that high academic achievement is a more salient factor than race/ethnicity when it comes to an individual's beliefs that he or she can perform specific behaviors to achieve particular performance outcomes (Gloria & Hird, 1999).

Findings Regarding the Relationship among Life-Skills Development, Racial/Ethnic Identity, Self-Esteem, and Self-Efficacy for High Achieving Undergraduates of Color (Research Question 3)

Results of the Pearson Product-Moment Correlation coefficients indicated that there are statistically significant relationships between Life-Skills Development, Racial/Ethnic Identity, Self-Esteem, and Self-Efficacy for High Achieving Undergraduates of Color. Darden, Gazda, and Ginter (1996) report that the successful development of the four life-skills dimensions is the basis for effective development in four domains of life: home, school, work, and community. Therefore, one possible explanation for the relationships found is that successful mastery of the life-skills measured by the Life-Skills Inventory-College Form influences the extent to which individuals feel positively about themselves and their futures as individuals and members of their race/ethnicity.

Results of the Pearson Product-Moment correlation coefficients conducted on each racial group indicated that there were more statistically significant relationships between life-skills development, racial/ethnic identity, self-esteem, and self-efficacy for Black participants. Fewer significant relationships were found for Biracial/Multiracial participants. One possible explanation for this finding is that awareness of race and the significance of racial/ethnic difference for Blacks begins in early childhood. The development of a racial/ethnic identity is context dependent. Noguera (2006) reports that children who attend racially diverse schools are much more likely to become aware of their race/ethnicity than children in more homogeneous settings. In this study, Blacks reported attending high schools where less than 10% of the student body were the same

racial/ethnic background as them. In adolescence, the awareness of one's race/ethnicity and its implications for individual identity becomes more salient for students of color. By the time these students enter college and university settings, through lived and vicarious experiences, they become more cognizant of racial/ethnic hierarchies, discrimination, and prejudice.

While this study has found that a positive racial/ethnic identity can be related to one's development of life-skills, collective self-esteem, and self-efficacy, it is important to note that for Biracial/Multiracial participants, the formation of a racial/ethnic identity is more complex in that they may identify with one, all, or none of their biological heritages (Suzuki-Crumly & Hyers, 2004). Also complicating the formation of their racial/ethnic identity is the development of facial and skin features. Individuals in the sample who look more Caucasian may identify more with the majority culture than their minority heritage. Another reason for few correlations between measures found for Biracial/Multiracial participants may be that research on the identification of Biracial/Multiracial individuals is limited, as well as, measures that use a significant number of Biracial/Multiracial individuals in their norms. It is also important to note that the Biracial/Multiracial subgroup of the sample only consisted of six participants while Blacks consisted of twenty.

Qualitative Findings Regarding the Messages Given to High Achieving Undergraduate Students of Color from Their Primary Caregivers that Influence Their Life-Skills Development, Racial/Ethnic Identity, Self-Esteem, and Self-Efficacy (Research Question 4).

The qualitative data from the open-ended sentences revealed three major messages that currently influence the thoughts and behaviors of participants the most: (a) the meaning of success, (b) how to handle difficult problems and (c) the importance of education. The majority of students also reported that their primary caregivers consisted of their mother and father.

Students indicated that gaining an understanding that the definition of success should be individualized was important to them. Students reported that their primary caregivers suggested that success means more than academic achievement and financial stability. Success could also entail having a loving family and being a happy and content person. This finding suggests that parents have taught their children to see themselves as more than academic achievers.

The qualitative findings also indicate that knowing how to handle difficult problems is a message that is currently important to participants. High achieving students encounter difficult challenges as they attempt to reach high aspirations. Therefore, knowing how to best approach difficult problems is critical for these students. Students also reported that learning the importance of staying calm and carefully thinking things through before making a decision was a critical message, as well as, using prayer and their faith as methods of coping with adversity.

Finally, students reported that messages regarding the importance of education continue to have an impact on their thoughts and behaviors. The students learned from the primary caregivers that obtaining a good education should be the most important part of their lives today. Students reported that their primary caregivers suggested that a good education is necessary for success and is fundamental to self-improvement.

Implications

University Programming

Universities should develop diversity recruitment programs that consider the specific needs of high achieving students of color beyond a focus on recruitment and retention. These programs need to be committed to promoting and fostering dialogues and events that promote mutual understanding and appreciation of diversity within the programs and campus community.

One suggested effort is to address the "colorblind" ideology reported by a number of participants regarding how they were taught to interact with others. A racially/ethnically diverse program, such as The Center for Undergraduate Research Opportunities Apprentice Program, is in a unique position to explore the historical and current experiences of diverse racial/ethnic groups and challenge the Eurocentric dominant power structure that has often explained the educational failure of these students (Wolsko, Park, Judd, & Wittenbrink, 2000). Students should be encouraged to not have a blind eye to the racial/ethnic backgrounds of their peers, but recognize the unique experiences and knowledge their peers bring to the Apprentice Program as members of their racial/ethnic group.

University diversity recruitment programs should collaborate with members of the campus community, particularly counseling psychologists, who are skilled in addressing issues related to student development and diversity and understand the impact of discrimination and racism on psychological health. For example, counseling psychologists could host a series of forums for high achieving students of color that address diversity issues and inter-racial/ethnic relations that can arise within the program

and on campus. University professors and other officials (e.g., student affairs professionals) can also lead these conversations in an effort to collaborate across academic departments to facilitate and expand interdisciplinary exchanges that express a multicultural focus.

Addressing Perceived Obstacles

Students of color reported that they believe they will face more obstacles than Caucasians and reported believing they would need to work harder than others to achieve the same goals. Therefore, it is suggested that students of color be taught different strategies for identifying, analyzing, and preparing for potential educational and career-related barriers (Brown & Lent, 1996). Students should be aided in learning how to determine the probability that a specific, race-related barrier will be encountered and how to develop strategies to prevent or manage the most likely barriers.

The obstacles reported by students of color and the need to work harder than others for the same goals reflect institutional racism that requires systematic changes. It is suggested that counselors, psychologists, educators, and other university officials engage in sociopolitical efforts to combat the existence of such discrimination (Luzzo & McWhirter, 2001). Furthermore, university personnel need to be aware of the possible stress and alienation that can often accompany students of color, particularly high achieving students (Kennebrew, 2002; Lease, 2002).

Participants may have the need to address their concerns regarding being a student of color and/or high achieving student at a Research Extensive University. Because counseling psychologists have a background in education, student development, multicultural, and social justice concerns, they are in an ideal position to address issues

pertinent to high achieving students of color. Counseling psychologists can respond to the need for personal and university-wide interventions by collaborating with students to understand and address their concerns. Building ties between counseling psychologists and university diversity recruitment programs (e.g., CURO-AP) should be strongly encouraged. Counseling psychologists can make counseling and peer support groups available for these students to provide them with the opportunity to explore issues related to their life-skills development, racial/ethnic identity, self-esteem, and self-efficacy.

Incorporating Messages from Primary Caregivers

Participants reported that most important messages given to them by their primary caregivers were messages regarding the meaning of success, how to handle difficult problems, and the importance of education. Therefore, participants should have the opportunity to engage in career counseling, particularly using a constructivist framework. Constructivist career counseling is an action-oriented approach that has its roots in psychology, cultural studies, science, and philosophy (McMahon, Patton, & Watson, 2003). The constructivist career theory views career planning as "life-planning" (McMahon, Patton, &Watson, 2003). By engaging in life-planning, participants can hone their own definition of the meaning of success and begin to identify the goals and objectives necessary to fulfill their definition of what it means to be successful. Students can also participate in psychoeducational workshops on problem-solving and decision-making and learn their own conflict-resolution style. Life-planning will also aid students in making informed decisions about their educational careers, such as identifying a compatible career path.

Being a proud member of their racial/ethnic group and keeping cultural traditions and values were also strong messages that participants of color received from their primary caregivers. Succeeding in college studies, particularly in a competitive research program for high achieving students, can be a daunting task for students of color at a traditionally White institution. It is important to note that issues of acculturative stress may be playing a role in high achieving students of color who attend traditionally White universities. "Acculturation has traditionally been defined as the process by which individuals understand and incorporate values, beliefs, and behaviors of the host culture in the context of the values, beliefs, and behaviors of the culture of origin" (Constantine, Okazaki, & Utsey, 2004). Most students of color hold values that differ from those of the dominant culture and they may feel pressure to adapt to or even adopt a Eurocentric orientation (Thompson, Anderson, & Bakeman, 2000). Acculturative stress refers to the psychological impact of adapting to a new culture (Constantine, Okazaki, & Utsey, 2004).

Mentoring by multiculturally sensitive faculty can serve as a guide through the educational process and aid students in maintaining their own personal identity while establishing a new professional identity. Kennebrew (2002) reports that multiculturally sensitive mentors can "provide a variety of functions: guidance, example, counseling, moral support, and facilitating the realization of a dream" (p. 141).

Successful mentors of color can help students learn how to negotiate the integration and/or maintenance of their cultural values and behaviors different than their own. While it is suggested that a match be made between the culture of the student and faculty mentor, it is important to note that Caucasian faculty and staff should not be

overlooked by students of color and vice versa. Culturally-sensitive Caucasian faculty and staff will need to use innovative methods to facilitate the connection (Kennebrew, 2002). It is also important to note that often people of color with higher adherence to their own cultural values have less positive attitudes towards seeking help from others for personal problems (Kim & Omizo, 2005). Therefore, institutional outreach efforts will need to be put in place through university programming, such as a mentorship program, the university counseling center, the Honors Program, the Office of Institutional Diversity, and Office of Student Affairs to reach these students. It is suggested that clinicians, educators, and other significant college/university personnel find more culturally ascribed ways of helping this population cope with acculturative stress and successfully achieve biculturalism, or the ability to successfully negotiate Traditionally White Institutions.

Psychological Benefits of Physical Fitness/Health Maintenance

The results of the study indicated that race/ethnicity was negatively correlated with scores on the Physical Fitness/Health Maintenance Skills of the Life-Skills Inventory. While no group scored high on this measure, Asians, Hispanics, and Biracial/Multiracial participants scored lower on this subscale than Blacks and Caucasian participants.

While the physical benefits of physical exercise are well known, the psychological benefits of exercise are often overlooked. Exercise has been scientifically proven to decrease stress by the release of endorphins and/or by creating an outlet from daily tension and anxiety (Salmon, 2001). It has also been found that moderate levels of exercise improve performance on memory and thinking tasks (Salmon, 2001). It is

suggested that programs, such as the CURO-AP, incorporate elements of physical fitness and health maintenance into their curriculum. One example would be to involve students in team building exercises, such as ropes courses, which spark creative energy, foster innovation, build self-confidence, and promote camaraderie.

Blacks and Hispanics and Public Collective Self-Esteem

Black and Hispanic students in the study had the lowest public collective self-esteem score on the collective self-esteem scale. The Public Collective Self-Esteem score taps individuals' beliefs abut the extent to which others feel positively about their social groups. People's group memberships provide them with a sense belonging, allow them in part to define themselves, and have the tendency to reflect positively on individual selves (Constantine, Robinson, Wilton, & Caldwell, 2002). If Black and Hispanic students believe that others view their racial/ethnic group negatively, this can impact their ability to feel comfortable as part of the CURO-AP and the university at large.

Counseling psychologists, in collaboration with the CURO-AP, and student affairs personnel should intentionally consider how the program and campus environment may contribute to the low public collective self-esteem of Blacks and Hispanics. In a study conducted by Constantine, Robinson, Wilton, and Caldwell (2002) on collective self-esteem and Black and Latino college students, it was found that public collective self-esteem and social support satisfaction were each significantly and positively predictive of Black and Latino student's cultural congruity. This finding suggests that peer social support may serve an important function in helping Black and Hispanic students feel more comfortable on the university campus. Counseling psychologists can

be particularly helpful in establishing social support networks and groups for Black and Hispanic students that not only assist in academic achievement efforts, but also in dealing with potential racial/ethnic challenges associated with matriculating in a traditionally White university environment (Utsey et al., 2000).

Diversifying CURO-AP

The primary goal of the CURO-AP is to enhance and increase the recruitment and retention of high achieving, historically underrepresented students of color. Historically, underrepresented students of color include students who are of lower socioeconomic status and first generation college students. While the student body of the CURO-AP reflects a commitment to diversity with regards to accepting students from various racial/ethnic backgrounds, it does not strongly reflect students from lower socioeconomic statuses and/or first generation college students. In fact, seventy-five percent of fathers of participants and sixty-six percent of mothers are graduates of four-year colleges or universities. Twenty-eight percent of fathers and mothers earned a graduate or professional degree. Twelve percent of fathers and seven percent of mothers earned a doctoral or medical degree. A significant number of students also report coming from homes with an income of over $50,000. Thirty-eight percent of students report having a family income over $100,000.

It is suggested that the program expand its diversification by recruiting and accepting more students from lower socioeconomic backgrounds and/or who are first generation college students. While African Americans are well-represented in the CURO-AP, it is highly recommended that Native Americans and Mexican Americans

and other Latino populations be recruited for participation in the program in an effort for the program to continue to meet its primary goal.

Low Self-Esteem

The results of the study indicated that all students had low self-esteem. Counseling psychologists should consider possible explanations for why these high achieving students of color have low self-esteem when many studies indicate that academic achievement should be correlated with high self-esteem (e.g., Kaplan, 1990). One possible explanation is that high achieving and gifted students have a heightened sensitivity to expectations and experience their own high expectations for achievement as a relentless pressure to excel. This pressure and fear of not living up to their expectations and those of others (e.g., parents, teachers, CURO-AP personnel) can lead to stress and negatively impact their self-esteem. Another explanation may be that pride in one's academic success or academic self-esteem represents but a small part of the general self-esteem of students (Kaplan, 1990). Problems with the instrument used to measure self-esteem may also explain this finding.

Recommendations for Future Research

1. It is recommended that race/ethnic and gender specific focus groups and/or individual interviews be conducted to gain more qualitative data to better inform the findings of the study regarding the significance of the relationships between race/ethnicity and gender and other variables examined in this study.
2. It is recommended that high achieving students of color from the entire Honors Program be used in the sample instead of a subset of the Honors Program, (i.e., The Center for Undergraduate Research Opportunities Apprentice Program). Using the entire Honors Program would yield a more diverse sample and statistical power would be increased. There may also be more variability in experiences.
3. It is recommended that future research consist of a longitudinal study to explore the possible changes in life-skills development, racial/ethnic identity, self-esteem, and self-efficacy in high achieving students of color from the beginning of their undergraduate education until the completion of their degrees.
4. It is recommended that future research consist of more international students and/or non-U.S. citizens to increase the variability of experiences of high achieving students of color.
5. It is recommended that future research examine the influence of age and student status on the variables examined.
6. It is recommended that a larger sample from several Research Intensive Universities be used in conducting this study to possibly build a model for predictive relationships between the variables investigated.

7. It is recommended that future research not use a convenience sample because the generalizability or external validity of the results is limited. Therefore, high achieving undergraduates from several U.S. and International colleges and universities should be recruited for participation.
8. It is recommended that future research not only look at generalized self-efficacy or the belief in oneself to cope with adversity, but also examine what specific coping mechanisms and behaviors high achieving students of color regularly utilize.

In summary, the goal of the current study was to investigate the life-skills development of racial/ethnic identity, self-esteem, and self-efficacy in high achieving undergraduates of color. This study explored differences based on gender and race/ethnicity on measures of life-skills development, racial/ethnic identity, self-esteem, and self-efficacy. The relationship among life-skills development, racial/ethnic identity, self-esteem, and self-efficacy was investigated. Some of the messages high achieving undergraduates receive from their primary caregivers related to life-skills development, racial/ethnic identity, self-esteem, and self-efficacy were explored. Findings from this study provide important information to inform the development and implementation of programming efforts to meet the needs of high achieving undergraduates of color. Additional research is needed to enhance generalizability and programming effectiveness.

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APPENDIX A

LSI-CF

DIRECTIONS: Read each statement and decide whether you:

A) completely disagree B) mostly disagree C) mostly agree D) completely agree

1. If I have a different opinion from what is being said, I am afraid to express my views.
2. I can accept different values in people my age.
3. My feelings keep getting in the way when I relate to people.
4. I have no problem saying "no" to friends and people my age.
5. Laws are necessary but can be questioned if unjust.
6. I am able to adapt to get along with different groups of people.
7. I do not understand why people behave the way they do.
8. I do not understand my parents.
9. When I listen to others, I am able to understand their feelings.
10. I get very little emotional support from people my own age.
11. I am able to maintain meaningful relationships with members of the opposite sex.
12. When I am with people my own age, I feel like an outsider.
13. I maintain my independence within my friendships.
14. I choose my friends by the way they look.
15. I do not get along with most members of my family.
16. Other people can depend on me.
17. I have good relationships with my peers.
18. I am able to communicate my needs and wants to my peers.

19. I make friends easily.

20. I respect people who have different backgrounds, habits, values, or appearances.

21. I am involved in community service.

22. I am able to manage any conflicts that might arise between home and school.

23. I am able to give to and receive from people.

24. I frequently discover important things by interacting with peers.

25. Being in groups is satisfying to me.

26. I am able to take directions and follow through on tasks.

27. I have set goals in life for myself.

28. I do not know which strengths to work on that will help me in the future.

29. There is no role model for me to look to in order to find out about the kind of work I might like to do.

30. I know how to find reliable information about jobs.

31. When solving problems, I am willing to explore multiple solutions.

32. I gather as much information as possible when making educational decisions.

33. I feel that I have to sacrifice my personal values when I make decisions.

34. Once I have made a decision, I do not usually change my mind.

35. I am able to use my experience in part-time work to help me decide my future occupation.

36. I know what steps to take to get the kind of job I want.

37. I do not have an effective way of making decisions.

38. I have made the right educational decisions so far.

39. I am able to handle my own money matters.

40. I have confidence in the decisions I make.

41. I can envision my future.

42. My emotions interfere with m ability to deal with the facts.

43. I know how to think clearly and solve problems in a crisis.

44. I am able to understand ideas and issues from different point of view.

45. I understand how emotions influence my decisions and actions.

46. I am able to use my problem-solving skills when encountering new situations.

47. I am able to resolve inner conflicts.

48. I think about the success or failure of my plans and goals.

49. I am unsure about what is normal in terms of sexual arousal and expression.

50. I do not like to participate in individual or team sports.

51. I have food health habits.

52. I exercise at least 20 minutes a day for three times per week.

53. I do not actively pursue my interests and hobbies.

54. I have satisfying leisure-time activities.

55. I understand the importance of choosing healthy foods.

56. I do things regularly that help me keep fit and healthy.

57. I practice preventative measures such as exercise, stress management, and maintaining a health diet.

58. I am aware of methods to control stress.

59. I have the willpower to eat healthy foods in moderation.

60. I understand the effects of alcohol on the body.

61. I understand how nicotine affects the body.

62. I consume caffeine on a daily basis.

63. I am aware of foods that are high in fat content.

64. I limit the daily intake of sugar in my diet.

65. I am overly concerned with my body weight.

66. I would like to have a perfect body.

67. I realize the psychological benefits of maintaining an exercise program.

68. I understand how to prevent the spread of sexually transmitted diseases.

69. I have a positive attitude about work.

70. I get confused as to what is appropriate behavior for males and females.

71. When I interact with people, I am able to be myself.

72. I understand the role of sexual intimacy in love relationships.

73. I want to be more independent but cannot do it without hurting others.

74. I understand there are broad ranges of differences among individuals.

75. My personal values guide me when I do things.

76. Everything considered, the way I am developing is fine.

77. Though I consider other people's ideas, I am not controlled by them.

78. I have a good sense of humor.

79. I do not act responsibly in relationships.

80. I have a specific career goal.

81. I am bothered by the difference between what I believe and what society expects.

82. I am able to deal positively with any frustrations and failures I face.

83. The way I express my anger either hurts me or somebody else.

84. Life is boring and I really cannot get excited about it.

85. The way I handle my emotions often hurts me or somebody else.

86. I am able to handle ambiguous situations.

87. I often think and act on my own.
88. There are certain people besides teachers from whom I learn.

Permission to use this instrument must be obtained from Dr. George Gazda or Dr. Billie Picklesimer.

APPENDIX B

CSES-R

INSTRUCTIONS: We are all members of different social groups or social categories. We would like you to consider **your race or ethnicity** (e.g., African-American, Latino/Latina, Asian, European-American) in responding to the following statements. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale from 1 to 7:

1	2	3	4	5	6	7
Strongly disagree	**Disagree**	**Disagree somewhat**	**Neutral**	**Agree somewhat**	**Agree**	**Strongly agree**

____ 1. I am a worthy member of my race/ethnic group.

____ 2. I often regret that I belong to my racial/ethnic group.

____ 3. Overall, my racial/ethnic group is considered good by others.

____ 4. Overall, my race/ethnicity has very little to do with how I feel about myself.

____ 5. I feel I don't have much to offer to my racial/ethnic group.

____ 6. In general, I'm glad to be a member of my racial/ethnic group.

____ 7. Most people consider my racial/ethnic group, on the average, to be more ineffective than other groups.

____ 8. The racial/ethnic group I belong to is an important reflection of who I am.

____ 9. I am a cooperative participant in the activities of my racial/ethnic group.

____ 10. Overall, I often feel that my racial/ethnic group is not worthwhile.

____ 11. In general, others respect my race/ethnicity.

____ 12. My race/ethnicity is unimportant to my sense of what kind of a person I am.

____ 13. I often feel I'm a useless member of my racial/ethnic group.

____ 14. I feel good about the race/ethnicity I belong to.

____ 15. In general, others think that my racial/ethnic group is unworthy.

____ 16. In general, belonging to my race/ethnicity is an important part of my self image.

APPENDIX C

GSE

INSTRUCTIONS: Below is a list of statements dealing with your general feelings about yourself. Please use the numbers below to indicate how true you believe the statement is about yourself.

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

1. I can always manage to solve difficult problems if I try hard enough.
   1 2 3 4

2. If someone opposes me, I can find the means and ways to get what I want.
   1 2 3 4

3. It is easy for me to stick to my aims and accomplish my goals.
   1 2 3 4

4. I am confident that I could deal efficiently with unexpected events.
   1 2 3 4

5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
   1 2 3 4

6. I can solve most problems if I invest the necessary effort.
   1 2 3 4

7. I can remain calm when facing difficulties because I can rely on my coping abilities.
   1 2 3 4

8. When I am confronted with a problem, I can usually find several solutions.
   1 2 3 4

9. If I am in trouble, I can usually think of a solution.
   1 2 3 4

10. I can usually handle whatever comes my way.
    1 2 3 4

APPENDIX D

MEIM

INSTRUCTIONS: In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic or Latino, Black or African American, Asian American, Chinese, Filipino, American Indian, Mexican American, Caucasian or White, Italian American, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be _____

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree (3) Agree (2) Disagree (1) Strongly disagree

_____1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

_____ 2. I am active in organizations or social groups that include mostly members of my own ethnic group.

_____3. I have a clear sense of my ethnic background and what it means for me.

_____4. I think a lot about how my life will be affected by my ethnic group membership.

_____5. I am happy that I am a member of the group I belong to.

_____6. I have a strong sense of belonging to my own ethnic group.

_____7. I understand pretty well what my ethnic group membership means to me.

_____8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

_____9. I have a lot of pride in my ethnic group.

_____10. I participate in cultural practices of my own group, such as special food, music, or customs.

_____11. I feel a strong attachment towards my own ethnic group.

_____12. I feel good about my cultural or ethnic background.

13. My ethnicity is _____ (Write the number here)

(1) Asian or Asian American, including Chinese, Japanese, and others
(2) Black or African American
(3) Hispanic or Latino, including Mexican American, Central American, and others
(4) White, Caucasian, Anglo, European American; not Hispanic
(5) American Indian/Native American
(6) Mixed; Parents are from two different groups
(7) Other (write in): _____

14. My father's ethnicity is _____(use numbers above)

15. My mother's ethnicity is _____(use numbers above)

APPENDIX E

RSES

INSTRUCTIONS: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle *SA*. If you agree with the statement, circle *A*. If you disagree, circle *D*. If you strongly disagree, circle *SD*.

1. On the whole, I am satisfied with myself.	SA	A	D	SD
2. At times, I think I am no good at all.	SA	A	D	SD
3. I feel that I have a number of good qualities.	SA	A	D	SD
4. I am able to do things as well as most other people.	SA	A	D	SD
5. I feel I do not have much to be proud of.	SA	A	D	SD
6. I certainly feel useless at times.	SA	A	D	SD
7. I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8. I wish I could have more respect for myself.	SA	A	D	SD
9. All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10. I take a positive attitude toward myself.	SA	A	D	SD

APPENDIX F

Messages from Primary Caregiver(s) Questionnaire

Please complete the following sentences.

1. My primary care-giver(s) taught me that education

_____

_____

2. My primary care-giver(s) taught me that having a career

_____

_____

3. My primary care-giver(s) taught me that success is

_____

_____

4. My primary care-giver(s) taught me that as a member of my racial/ethnic group

_____

_____

5. My primary care-giver(s) taught me that as a man/woman

_____

_____

6. My primary care-giver(s) taught me that when interacting with members of a different racial/ethnic group

_____

_____

7. My primary care-giver(s) taught me that as an academically talented student

_____

_____

8. My primary care-giver(s) taught me to maintain relationships by

_____

_____

9. My primary care-giver(s) taught me that expressing emotion

_____

_____

10. My primary care-giver(s) taught me the best way to engage in self-care or take good care of myself is

_____

_____

11. My primary care-giver(s) taught me the best way to handle difficult problems and/or deal with adversity

_____

_____

12. Of all the messages you listed above, which message currently influence your thoughts and behaviors the most?

_____

_____

_____

13. Who is/are your primary care-giver(s) who gave you these messages (i.e., mother, father, aunt, uncle, grandparent, sibling, etc.)?

_____

_____

APPENDIX G

Number: _____

THE CENTER FOR UNDERGRADUATE RESEARCH OPPORTUNITIES APPRENTICE PROGRAM

IMPACT SURVEY

Please use the following scale for questions 1 through 36.

a. Strongly disagree
b. Disagree
c. Agree
d. Strongly agree

Participation in the CURO-AP has helped to build your confidence in the following academic areas:

1. maintaining or improving your G.P.A.	a	b	c	d
2. public speaking	a	b	c	d
3. actively participating in a group discussion	a	b	c	d
4. moderating a group discussion	a	b	c	d
5. time management	a	b	c	d
6. understanding of the research process	a	b	c	d
7. stress management	a	b	c	d
8. decision-making regarding graduate school	a	b	c	d
9. critical thinking	a	b	c	d
10. collaborating effectively with others	a	b	c	d

Participation in the CURO-AP has helped to build your confidence in your skills in the following research areas:

11. writing an abstract	a	b	c	d
12. presenting at a professional conference	a	b	c	d
13. conducting a research project	a	b	c	d
14. critiquing research literature	a	b	c	d

15. constructing an honors thesis	a	b	c	d
16. selecting a research project	a	b	c	d
17. selecting a research mentor	a	b	c	d
18. identifying major research in your discipline	a	b	c	d
19. working with others in a research setting	a	b	c	d
20. locating resources available in your field	a	b	c	d

Which of the following activities have helped you to self-reflect and more deeply understand your CURO-AP experiences?

21. meetings with CURO-AP director	a	b	c	d
22. meetings with CURO-AP graduate student	a	b	c	d
23. meetings with research faculty mentor	a	b	c	d
24. meetings with CURO-AP senior peer advisor	a	b	c	d
25. CURO-AP organizational meeting	a	b	c	d
26. writing about CURO-AP work in journals	a	b	c	d
27. informal discussions with other apprentices	a	b	c	d
28. informal discussions with program graduates	a	b	c	d
29. dialogue with other faculty	a	b	c	d
30. attending the weekly research seminar	a	b	c	d

The CURO-AP has provided opportunities to:

31. share my cultural background and traditions with participations	a	b	c	d
32. learn about cultural differences from each other	a	b	c	d
33. gain more understanding of who I am as a racial/cultural/ethnic being	a	b	c	d
34. engage in conversations about racial tolerance	a	b	c	d
35. challenge my beliefs and assumptions about race, culture, and ethnicity	a	b	c	d
36. gain more culturally diverse experiences than other students at UGA	a	b	c	d

37. Please rank your 1st, 2nd, and 3rd choice for the most important opportunities provided by the CURO-AP based on your experience.

_____ community service
_____ leadership development
_____ scholarly dialogue
_____ be a member of a culturally diverse group of students
_____ enhancing and building your resume
_____ development of new personal and professional skills
_____ exploration of career options
_____ opportunity to connect research with your academic work
_____ financial needs met by stipend
_____ opportunity to present research at symposiums
_____ make lasting friendships
_____ be identified as a member of a prestigious group at UGA
_____ preparation for graduate or medical school by getting a head start in performing research activities

38. To what extent do you anticipate being involved in research after graduation?
    a) Not at all active
    b) Somewhat active
    c) Active
    d) Very Active
    e) Full time

39. In general, how would you characterize your intended career? (Mark all that apply).
    a) business and finance
    b) education (elementary, secondary, or higher education)
    c) nonprofit sector
    d) civil service, government, or military
    e) law or criminal justice
    f) religion
    g) arts
    h) health care or medicine
    i) social work, psychology, or human services
    j) other _____

40. How has the CURO-AP influenced your career plans?
    a) Hasn't influenced
    b) Confirmed your career choice
    c) Influenced the development of a new career choice

41. Do you have plans to pursue a graduate, professional, or medical degree now or at any time in the future?
    a) Yes
    b) No
    c) Uncertain
    If yes, what will be your area of study?_____

42. Please estimate your probability of obtaining a graduate, professional, or medical degree.
    _____% probability

43. What plans do you have for the first year after graduation? (Mark all that apply)
    a) Full-time employment on your chosen career path
    b) Employment outside your preferred career path
    c) Graduate or professional school
    d) Medical school
    e) Travel
    f) Other_____

44. Have you ever thought of leaving or dropping out of college?
    a) Yes
    b) No (Please go to question 45)

44a. If yes, please share your reasons for wanting to leave or drop out.
_____
_____
_____
_____

44b. If yes, has any aspect of the CURO-AP influenced your decision to stay and finish? (Circle all
that apply.)
    a) CURO-AP financial support
    b) Your research activities
    c) Your service activities
    d) Relationships with apprentices
    e) Relationships with CURO-AP staff
    f) Relationship with faculty mentor
    g) The desire to complete the CURO Apprentice Program

45. Have you ever thought of leaving or dropping out of the CURO-AP?
    Yes, but I decided to continue
    Yes, and I decided not to continue
    No (Please go to question 46).

45a. If yes, please share your reasons for not wanting to continue the program.

_____
_____
_____
_____

45b. If yes and you decided to continue, has any aspect of the CURO-AP influenced your decision to stay
and finish? (Mark all that apply.)

a) CURO-AP financial support
b) Your research activities
c) Your service activities
d) Relationships with apprentices
e) Relationships with CURO-AP staff
f) Relationship with faculty mentor
g) The desire to complete the CURO Apprentice Program

46. Have you ever been placed on probation by the CURO-AP?

a) Yes
b) No

46a. If yes, please indicate the reason below.

a) Failure to maintain a grade point average above a 3.0
b) Failure to attend weekly research seminar
c) Failure to complete research requirements

46b. If yes, what any aspect of the CURO-AP influenced your decision to stay and attempt to get back in good standing? (Mark all that apply.)

a) CURO-AP financial support
b) Your research activities
c) Your service activities
d) Relationships with apprentices
e) Relationships with CURO-AP staff
f) Relationship with faculty mentor
g) The desire to complete the CURO Apprentice Program

47. To what extent do you consider being a CURO apprentice central to your identity as a UGA student?

Not at all
Very little
Somewhat
Strongly
Very strongly

48. How has participating in the CURO-AP affected your overall UGA academic experience?
    a) Hindered or negatively affected
    b) Somewhat hindered or negatively affected
    c) No impact
    d) Positively affected
    e) Very positively affected

49. How has participating in the CURO-AP affected your overall UGA social experience?
    a) Hindered or negatively affected
    b) Somewhat hindered or negatively affected
    c) No impact
    d) Positively affected
    e) Very positively affected

50. How has participating in the CURO-AP affected your ability to make a successful transition from high school to college?
    a) Hindered or negatively affected
    b) Somewhat hindered or negatively affected
    c) No impact
    d) Positively affected
    e) Very positively affected

51. To what extent has being a CURO apprentice helped you to feel more part of the UGA community?
    a) Not at all
    b) Very little
    c) Somewhat
    d) Strongly
    e) Very strongly

52. Please evaluate your CURO-AP experience overall:
    a) Very negative
    b) Negative
    c) Positive
    d) Very positive

53. What was your main reason for initially choosing to apply to the CURO-AP?

_____
_____
_____
_____
_____

54. Did your acceptance into the CURO-AP influence your decision to attend UGA? Please explain why or why not?

_____
_____
_____
_____
_____

55. In what ways has (or has not) the program met your expectations?

_____
_____
_____
_____
_____
_____
_____

56. Please share your best experiences and most difficult experiences at UGA.

_____
_____
_____
_____
_____
_____
_____

57. Please share how participation in the CURO-AP has impacted your experiences at UGA.

_____
_____
_____
_____
_____
_____
_____
_____

THANK YOU FOR YOUR PARTICIPATION!

APPENDIX H

Demographic Questionnaire

1. Student Status

    a. First year
    b. Second year
    c. Third year
    d. Fourth year

2. Age _____

3. What is your gender?
    a. Male
    b. Female

4. What is your race/ethnicity?
    a. African/Afro-Caribbean African American/Black National Origin _____
    b. American Indian/Native American National Origin _____
    c. Asian-American/Asian National Origin _____
    d. Hispanic/Latino/a National Origin _____
    e. Caucasian/White (non-Hispanic) National Origin _____
    f. Biracial/Multiracial National Origins_____
    g. Other (please indicate)_____

5. What is your citizenship status?
    a. Citizen of U.S.
    b. U.S. immigrant - permanent resident
    c. Non-immigrant – student or visitor

6. What is the highest educational level of your father?

    a. Less than High school
    b. High school diploma or equivalent
    c. 2-year degree or some college
    d. 4-year degree
    e. Graduate/Professional degree
    f. Doctorate/Medical Degree

7. What is the highest educational level of your mother?
    a. Less than High school
    b. High school diploma or equivalent
    c. 2-year degree or some college
    d. 4-year degree
    e. Graduate/Professional degree
    f. Doctorate/Medical Degree

8. What is your father's occupation? _____

9. What is your mother's occupation? _____

10. Family income level$0 to 9,999
    a. $10,000 to 19,999
    b. $20,000 to 29,999
    c. $30,000 to 39,999
    d. $40,000 to 49,999
    e. Over $50,000
    f. Over $100,000

11. What is your major(s) or intended major(s)?
    _____

12. I serve(d) as an apprentice in the following class.
    a. 2004-2006
    b. 2003-2005
    c. 2002-2004
    d. 2001-2003

13. How many semesters did you participate in the CURO-AP? (Do not count summer semesters).
    a. One
    b. Two
    c. Three
    d. Four

14. From what type of high school did you graduate?
    a. Public
    b. Private

15. Did your high school engage you in research activities?
    a. Yes
    b. No

15a. If yes, please describe._____
_____

16. What percentage of students in your high school was of the same racial background as you?
    a. 10% or less
    b. 11-25%
    c. 25-50%
    d. 51-75%
    e. 76-100%
17. Did your high school have a Honors, Accelerated, or Gifted and Talented Program (or the equivalent)?
    a. Yes
    b. No

17a. If yes, did you participate in that program?
    a. Yes
    b. No

18. What was your SAT score? _____ ACT score? _____

19. What is your current overall G.P.A.? _____

20. Are you a member of the Honors Program at The University of Georgia?
    a. Yes
    b. No

APPENDIX I

Consent Form

I, _____, agree to take part in a research study entitled "Investigating the Life-Skills Development, Self-Esteem, Self-Efficacy, and Ethnic Identity of High Achieving Students of Color" which is being conducted by Catherine L. Packer, M.A., a doctoral candidate in Counseling Psychology, under the direction of Dr. Rosemary Phelps (Department of Counseling and Human Development Services, The University of Georgia, 402 Aderhold Hall, 706-542-4221). I recognize that I do not have to take part in this study; I can stop taking part at any time without giving any reason and without penalty. I can ask to have information related to me, returned to me to the extent that it can be identified as mine, removed from research records, or destroyed.

The following points have been explained to me:

1) The purpose of the study is to identify the impact of participating in The Center for Undergraduate Research Opportunities Apprentice Program and investigate the life-skill development, self-esteem, self-efficacy, and ethnic identity of CURO apprentices.

2) The benefits I may expect to gain from the study are new insights regarding what factors of the program may contribute to my personal and professional life.

3) My part in this study will take approximately 45 minutes. I understand that I will be asked to do the following things in relation to participating in this study:
   a) Listen to an explanation of the study; and if I agree to participate, sign two copies of the informed consent form. One copy will be retained for my records, and the other copy will be returned to the researcher.
   b) Complete a packet of questionnaires.

4) No discomforts or risks are expected. However, participants may experience heightened sensitivity and/or awareness regarding feelings towards his/her race or that of others by participating in this study. If difficulties arise, I can discuss them with the researcher, or I will be referred to the UGA Center for Counseling and Personal Evaluation (706-542-8508) or to Counseling and Psychological Services (706-542-1162).

5) I understand that the data collection process in this research study will be confidential. The only people who will know that I am a research subject are members of the research team. No identifying information about me, or provided by

me during the research, will be shared with others, except if necessary to protect my rights or welfare (for example, if I am injured and need emergency care); or if required by law.

6) None of the information collected will be identified with me. To ensure security of the data, they will be stored in a locked filing cabinet to which only the principal researcher has access. All results will be reported in aggregate form. No negative consequences (i.e., able to continue participating in the program) will result from my participating in this research project.

7) The researcher, will answer any questions about the research now or at a later time. She can be reached by telephone at: 334-718-3816 or by email at: clpacker@uga.edu.

8) I understand all of the procedures described above. My signature below indicates that the researcher has answered all of my questions to my satisfaction and that I consent to participate in this study. Additionally, I acknowledge that I have been given a copy of this form.

Name of Researcher	**Signature**	**Date**
Catherine L. Packer	_____	_____
334-718-3816		
Clpacker@uga.edu		

Name of Participant	**Signature**	**Date**
_____	_____	_____

For questions or problems about your rights please call or write: Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-mail address IRB@uga.edu.

APPENDIX J

Script Used for Initial Contact

Catherine Lynne Packer is a Counseling Psychology doctoral candidate at The University of Georgia who is interested in investigating the life-skills development, self-esteem, self-efficacy, and racial/ethnic identity of high achieving students. She is specifically interested in recruiting members of the Center for Undergraduate Research – Apprentice Program. To participate in this study, you will be asked to take approximately 45 minutes of your time to complete a packet of questionnaires during the weekly research seminar. Please contact the Center for Undergraduate Research – Apprentice Program Director or Graduate Assistant if you would like to participate.