THE INFLUENCES OF ASSETS ON THE ACADEMIC ACHIEVEMENT OF AFRICAN AMERICAN COLLEGE STUDENTS

By

Chantel Laran Sawyer Lumpkin

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

2001

ABSTRACT

THE INFLUENCES OF ASSETS ON THE ACADEMIC ACHIEVEMENT OF AFRICAN AMERICAN COLLEGE STUDENTS

By

Chantel Laran Sawyer Lumpkin

This study identified significant differences between the assets of Black and White college students, examined relationships between Black students' assets and Black family's strengths, and explored how assets influence the academic achievement of Black college students. A sample of 173 African American college students, aged 17-23, were administered the Michigan State University Student Assets Survey (MSUSAS), a self-report index of college students' assets, risks and stressors. Assets are the positive characteristics and experiences provided to students by parents, peers, school, community, and selves, for the purpose of decreasing risk behaviors and increasing incidences of successful living. Being strengths-based traits, assets are culturally equated with coping strategies and Hill's (1999) five strengths of Black families.

To identify the assets of African American college students attending a predominantly White institution of higher learning, exploratory factor analyses were conducted on student responses. Thirty-nine assets were identified as characteristic of Black college students. The five Black family strengths and three intervening variables (reconstructed community of support, student employment related to major, and student employment hours worked) were then used to

operationalize the 39 assets for the purpose of developing a proposed model for evaluating academic achievement.

Path analyses were conducted to examine the best fit of causal paths. Based on these analyses, it was noted that the assets of African American college students significantly differ from the assets of White students and significantly relate to Hill's (1999) five strengths of Black families; and the construct of faith was significantly related to a reconstructed community of support and academic achievement. Conclusions were discussed numerating limitations of this study and implications for further research, practice, and policy.

This dissertation is dedicated to the African American students of this study.

ACKNOWLEDGEMENTS

I would like to acknowledge all who made this possible. To my committee chair and advisor Dr. Francisco Villarruel, thanks for your guidance and cultural and community input. To my major professor Dr. Joanne Keith, thank you for seeing my assets and insisting that I pursue this topic of research. It has opened more doors than I could have imagined. To my committee member Dr. Anne Soderman, thank you for modeling great teaching and for your questions that challenged me to think more objectively. To my committee member Dr. Dorothy Harper Jones, thanks for your mentorship and support. You helped me to follow my heart. To committee member Dr. Melissa Quon-Huber, thanks for helping me to understand. You knew that I would have chosen a different *path* if possible.

To all the African American students who participated in this study, thanks for showing your strengths. Keep striving for academic achievement.

To the entire MSUSAS Research Team – thanks for pushing me out of my comfort level into the world of quantitative research. The journey was often very rough for all concerned, but well worth the destination. Thanks to all the Family and Child Ecology faculty and support staff, and also to the administrative and support staff of University Outreach Partnerships.

Last, but not least, I thank my own community of support: my mom, grandmother, stepfather, brothers, prayer partners, friends, classmates, and

God. Although I may have listed Him last, I primarily contribute my academic achievement to having a strong foundation of faith in Christ.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1

INTRODUCTION

Specific to research conducted with youth ages 12 -18 years, Search Institute composed a list of forty assets found to increase thriving indicators and opportunities for success (Benson, 1997). Assets of developing individuals are defined as the positive characteristics and experiences provided jointly by individuals and the multiple levels of their environment: their family, peers, school, community, faith-based communities and society. Also defined as strengths, increased numbers of assets were found to directly correlate to increased indicators of success and inversely correlate to decreased reports of risk behavior involvement (Scales & Leffert, 1999). These patterns of positive developmental outcomes are based on research conducted with thousands of youth, of whom eighty-six percent were White, suburban, middle-class, and midwestern. Therefore, questions were raised as to the applicability of the findings to non-White youth, of differing socioeconomics and developmental stages or age. Based on these concerns, it is posited that cultural factors, such as ethnicity, stage of development, and environment, have influence on the types and prevalence of assets provided to African American[1] college students. It is also posited that these assets are significant predictors of academic success.

Using the assets framework as a foundation, a group of faculty, staff, and students developed the *Michigan State University Student Assets Survey* (Keith,

[1] For the purpose of this study the term African American will be used interchangeably with Black and Black American. African American is defined in the American Heritage Dictionary as an American ethnic group also referred to as Black or Black American, whose members are descended from African people having dark skin.

Villarruel, Gardner, Lumpkin, & Daenzer, 1999) to examine community influences on assets presented by college students transitioning from adolescence to adulthood. To further examine the influence of ethnicity on the presence and prevalence of assets for college students, a culturally sensitive model was adapted from previously published research for viewing the assets of the subset of African American college students through the lens of Hill's (1999) theoretical strengths of Black families. This model was then used to predict thriving indicators of academic achievement specific to African American college students.

Statement of the Problem

Matriculation and academic achievement have long been issues of concern in regards to African American college students. Studies have focussed on the numbers of African Americans entering college, attendance at predominantly White institutions versus historically Black institutions, and rates of attrition and graduation (Allen, Epps & Haniff, 1991; Brawer, 1996; Wilds, 2000). In the past decade, there has been a noticeable increase in the number of African Americans entering college, however, fewer are attaining degrees, and most are taking longer to do so (Wilds, 2000). Based on past reports that examined student retention and graduation rates at MSU, less than ten percent of the incoming Black freshmen are expected to graduate in four years, and less than thirty percent are expected to receive their baccalaureate degree within five years of entry (MSU Women's Resource Center, 1999). While MSU graduation rates for completion of African American students are lower than national data,

they are not dramatically different. Nationwide, degree completion time for Black students has been reported as 19.4% in four years, 31.2% in five years, and 33.9% in six years ("More bad news", 1996/97).

While an array of reasons for "delayed" completion have been offered, most studies of time to degree completion involving African American students are deficit-based, as they focus on the causes of attrition and lack of achievement (Brawer, 1996; English, 1992; Jackson & Malott, 1994; Lang & Ford, 1988; "More bad news", 1996/97; Piotrowski & Perdue, 1998; Rowser, 1990; Sailes, 1999; Sherman, Guiles & Williams-Green, 1994; Wiley, 1989). While these studies provide important insight, they collectively fail to offer perception about what might be done to enhance the probability of matriculation as opposed to prevention of dropout. Such insight would be provided through study of assets that contribute to academic achievement, and exploration of assets made available to the student. The findings would provide an understanding of what can be done by the university community and individuals to increase the success of African American students in higher education.

Purpose of the study

This quantitative study seeks to identify assets most characteristic of the African American college student and their community, for the purpose of 1) determining the cultural influences on the development of assets provided by the multiple levels of an individual's ecological systems; and 2) distinguishing those assets most indicative of academic achievement. This study is unique in that it purports the findings will be embedded within a strengths-based culturally

sensitive model to identify the assets presented by African American students. The findings from this investigation can then be used by college and university administrators to develop and implement policies and practices which may contribute to and increase the likelihood of matriculation and academic success of African American college students attending predominantly White institutions of higher learning.

Rationale for the Study

There has been recent expansion in the use of culturally sensitive models to assess resiliency factors (positive behaviors and competencies exhibited by individuals despite chronic adversity) associated with Black adolescents (McCloyd, 1999; McCloyd & Steinberg, 1998; McCubbin, Thompson, Thompson, & Futrell, 1998). Culturally sensitive models often utilize holistic or ecological frameworks, examining the bidirectional influences of the individual on the environment and vice versa (Billingsley, 1992; Bronfenbrenner, 1988). Holistic strengths-based assessments tend to look at ecological factors that contribute to an individual's lack of involvement in risk behaviors for the purpose of soliciting the active participation of the ecological systems to provide environments that help prevent and minimize risk occurrences and encourage more positive behaviors.

The purpose of this investigation is to shift from a deficit-based focus to a strengths-based focus and utilize a culturally sensitive and ecological paradigm to discern the unique strengths and attributes of African American young adults enrolled in a predominantly white institution. Specifically, this investigation

explores factors that *may* contribute to the success of African Americans in higher education. This assets framework, while exploratory in nature, can contribute to our collective understanding of what institutions of higher education can offer to strengthen the likelihood of matriculation for African Americans attending predominantly White institutions. Moreover, this study is unique in two respects. First, it represents one of the initial attempts to apply an assets framework to individuals in the late adolescence/early adulthood stage of their lives. Second, while using an assetsframework, it attempts to adapt a culturally specific model of developmental assets.

Importance of the problem

There is a need for research that identifies the assets of developmental stages previously overlooked in research studies; considers the ecological influences of an individual's ethnicity in context of the racial makeup of the institutional structure; and is proactive and achievement oriented rather that reactive and deficit focused. Such a model would focus on the strengths of college students, ages 18-23, in the stage of transition from adolescence to adulthood; as well as the strengths of the African American student attending a predominantly White institution of higher learning. Such a strengths-based model may be used to promote and encourage university, community, and parental support of African American university students for the purpose of decreasing risk behavior involvement and improving retention rates, academic achievement and graduation numbers.

The need for a developmentally appropriate and culturally sensitive strengths-based model is made more apparent in light of the limitations of current research specific to the development of African American young adults. This research tends to be either deficit-based, comparative, lacking in measurement equivalence, lacking in consideration of contextual influences, and/or limited in its applicability to matriculation and academic achievement. Deficit based approaches focus on the percentage of African Americans that are involved in risk behaviors (Jackson & Malott, 1994); the percentage of African Americans who drop out of college (English, 1992; Kobrak, 1992; Piotrowski & Perdue, 1998; Sailes, 1993); low enrollment rates of ethnic minority students (Wilds, 2000); and causes of attrition (Allen, 1985, 1992). In addition, most of the deficit-based studies tend to be quantitative in scope, reporting the rates of enrollment or attrition, but providing minimal insight in regards to the ecological factors that possibly influence these rates for African American students.

Culturally sensitive equivalence measurements consider the effect of the cultural influences on the definition of constructs being measured, and make adjustments to increase reliability across ethnic lines (Knight & Hill, 1998). For example, Lucero (2000) notes in her study of the cultural measurements of assets, the changes made to the basic model by the Latino, American Indian and Asian American communities, so that the essence of assets was understood, measurable, and accepted.

Comparative studies contrast the measurement of one construct for one group of subjects against the measurement of the same construct for another

group of subjects. Unfortunately, a win-lose philosophy is set as in most cases one group is considered the norm, and the other groups are often found deficient when measured against this group (Steinberg & Fletcher, 1998). Other concerns include failures to consider covarying variables as confounding the measurements and the influence of context. A number of studies of ethnic minority students list the ethnicity and other demographics as environmental labels or "social addresses" that presuppose similar developmental experiences and outcomes based on ethnicity, socioeconomic status, gender, family structure, and so on (Bronfenbrenner, 1988). Social address models give little regard for how the environmental contexts might influence behaviors, attitudes or developmental processes (Rowser, 1990). Studies specific to the matriculation and achievement of African American students have tended to be comparative (Cabrera et al., 1999; Heath, 1992; Sodowsky et al., 1994), and or deficit based being focused on attrition or retention problems (Jackson & Malott, 1994; Kobrak, 1992; Lang & Ford, 1988; Piotrowski & Perdue, 1998; Sailes, 1993).

A strengths-based approach does not ignore the problems or concerns, but rather considers them with plans of emphasizing what has shown to be successful while believing that increasing the positive factors consequently decreases the negative factors. The positive based focus being used for this study will identify and examine the strengths presented by the ecological systems of the African American college students.

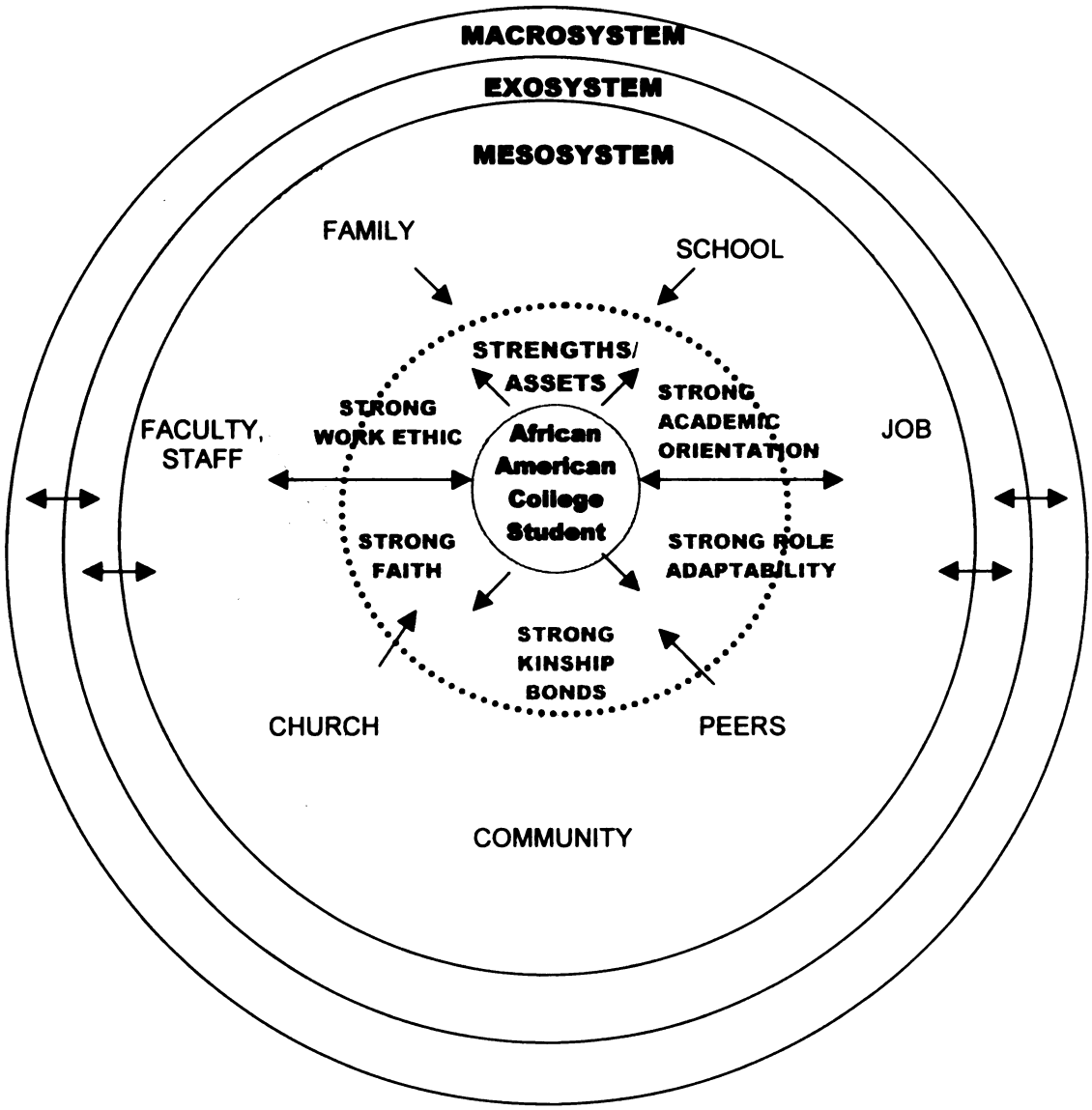
Theoretical Model

Ecological systems involve the interactions of the internal characteristics of the individual (i.e. developmental stage, gender, beliefs, values, and behaviors), within the context of his/her external systems of family, school, community, congregation of faith, and/or society. Particular consideration will be given to the individual factors of cultural identity, age of development and college student role, and the external factors related to the academic community. Figure 1 depicts the ecological framework for this study examining factors that contribute to the presence and provision of assets that show significant indication of promoting academic achievement.

Insert Figure 1 about here

The integration of Bronfenbrenner (1979) and Billingsley's (1992) models of human ecological development underscore the unique and specific aspects of development. Further integration of Hill's (1999) African American strengths' model underscores adaptive strategies and experiences provided to the developing individual by the surrounding ecological settings. Specifically, this model purports that assets of the African American college students are provided jointly by the students and the overlapping settings of their ecological environments. In the model, the microsystem is the student and his/her roles, immediate settings, and regular activities (Bronfenbrenner, 1979). The next proximal setting, or mesosystem, indicates the interrelations of the settings of

Figure 1
Theoretical Model of the Assets of African American College Students. (Adapted from Billingsley, 1992, Bronfenbrenner, 1979, and Hill, 1999).



which the individual is an active participant (Bronfenbrenner, 1979). The mesosystem is influenced by student status, age and ethnic culture, and includes family, college/university, school faculty and staff, peers, church, community, and job site (Billingsley, 1992). Based on Billingsley's (1992) holistic perspective of developing Black youth and families, both the microsystems and mesosystems are presumed to be ethnically homogeneous, while the Black youth is underage and residing at home with family. However, it is important to note that for Black college students, these settings may be homogeneous or heterogeneous, based on their residence while attending school and the ethnic makeup of the collegiate environment. According to Hill's (1999) theoretical strengths of Black families, it is proposed that African American college students are provided with the assets of academic orientation, role adaptability, kinship bonds, faith, and work orientation. In this model assets indicate the strengths-based characteristics of the systems that surround and sustain the enveloped individual, enabling the individuals to interact effectively with their immediate settings, and providing strengths for traversing the distal processes of the environments represented by the exosystem and macrosystem.

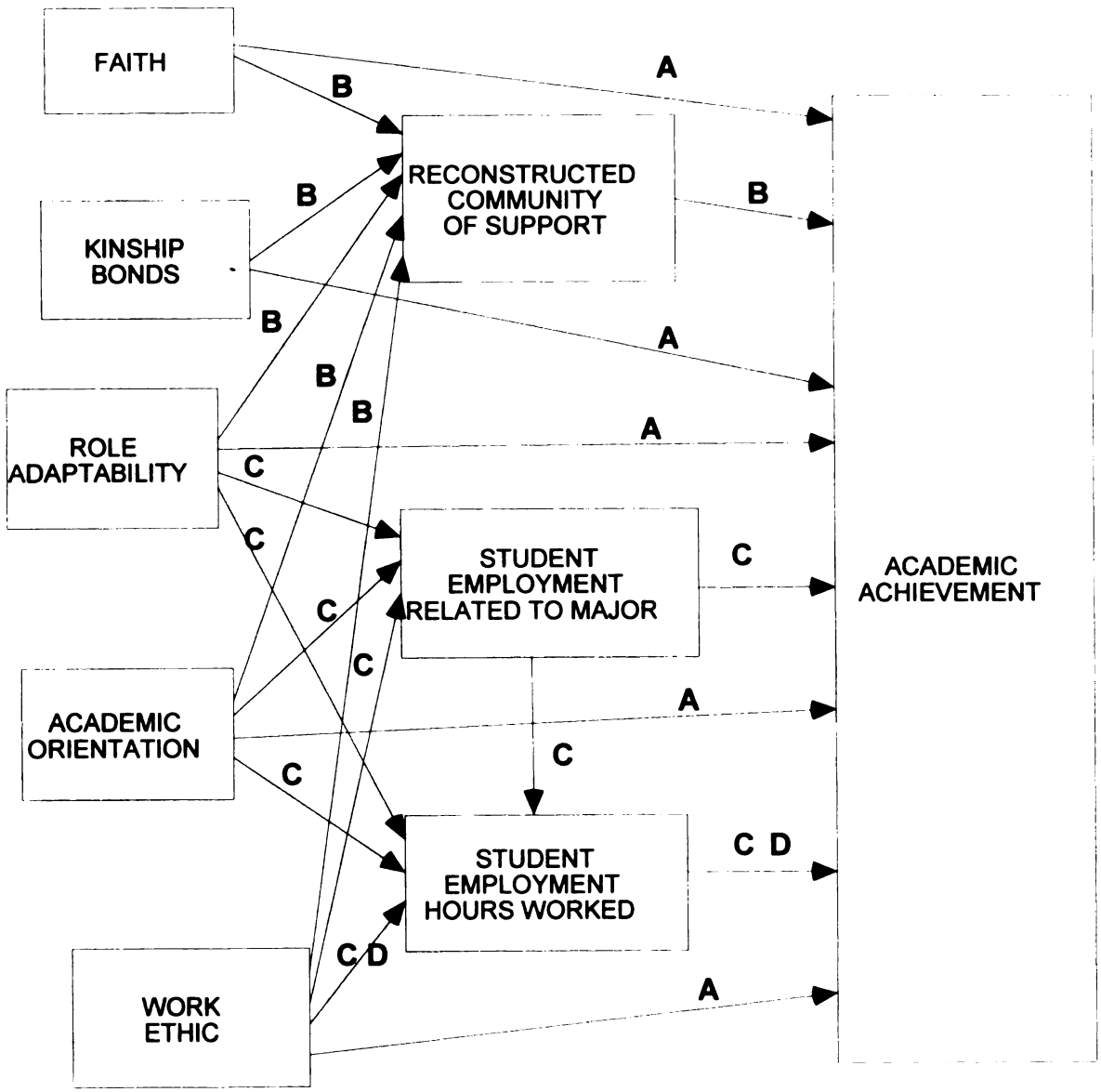
This ecological model and previous research provide a basis for addressing several research questions and hypotheses pertaining to African American college students: What are the assets or strengths particular to African American college age students? Which of these assets are strong indicators of academic success? Which of these assets are possible hindrances to academic achievement? And, which of these assets are most likely to be found as

characteristic of African American college students attending predominately White universities? A series of factor analyses were calculated to examine the presence of assets and their correlations to the five strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic. These strengths were operationalized by the identified assets and used as independent variables of a culturally appropriate assets model specific to African American college students. A path analysis model, depicted in Figure 2, was then developed to examine the relationships between the variables as predictors of academic achievement.

Insert Figure 2 about here

In the path analysis model, Path A examined the direct relationship between the strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic with academic achievement. Path B examined the relationships of the five strengths on the reconstruction of a community of support. It was hypothesized that students indicating characteristic family strengths were supported by family and community and thus more inclined to reconstruct a school-based communal system of support to replace the family and community displaced by student's attendance and residence at college. This reconstructed community would include faith-based entities, peers, university personnel, and resources to support the student's matriculation and influence academic achievement. Path C examined the covarying influences of role

Figure 2:
Overall Theoretical Model



adaptability, academic orientation, and work ethic on students' employment related to field of study and number of hours worked. While it was hypothesized that employment related to students' major would positively influence academic achievement, the number of hours worked were hypothesized to be inversely related to academic achievement. Path D examined the causal relationship of work ethic with student employment hours worked and academic achievement. When students' employment was influenced only by a strong belief in working to achieve, the number of hours worked increase, and academic achievement decreases.

The objectives of this exploratory investigation, then, were to (a) determine the ecological influences of ethnicity, developmental stage and context on the development of assets for African American college age students; (b) develop a culturally sensitive framework to identify assets particular to African American college students; and (c) identify the types and prevalence of those assets predictive of the academic success of African American college students. This investigation will provide a basis for understanding the ecological factors that are thought to contribute to the academic achievement of African American college students.

Chapter 2

REVIEW OF LITERATURE

Based on the ecological and contextual theories of human development, this study investigated the positive characteristics of African American college students and the influences of those characteristics on academic success. This chapter reviewed research that addressed issues of the ecological influences of ethnicity, cultural context, late adolescence/young adulthood stages of development, assets, and strengths. Also examined was previous research on academic achievement and African Americans in higher education. The latter topic provided further support for this study and its culturally appropriate strengths-based focus on African American college students.

The ecological influences of context, developmental stage, and ethnicity

Human ecological theories focus upon the interdependency of human growth and development and the contexts within which individuals interact. A reciprocal relationship is established as the individual develops, influences, and perhaps even facilitates the development of context. Characteristics of the larger system may contribute to the positive development of individuals, while simultaneously the attributes of individuals may serve to shape the institutions of the larger system. The asset-based approach used in this study seeks to determine which individual and institutional factors interact to increase the probability of successful academic outcomes for African American students in predominantly White institutions of higher learning. The following sections will

extrapolate theoretical parameters from various human ecological and developmental theories that established the foundation of this study.

Ecological Contexts. Human ecology focuses on the development of humans as biological organisms and social beings interacting with the multiple levels of the immediate settings and in consideration of the context within the larger environment (Bronfenbrenner, 1979). There are four levels or settings, conceived as embedded concentric circles. The developing individual exists in the smallest, innermost circle, or microsystem. This system also contains the immediate settings, pattern of roles, and activities that maintain frequent interaction with the developing individual. For example, the microsystem of the college student may include student status, college campus setting, and academic activities. The next level of the human ecology model is the mesosystem, which comprises the interactions between the microsystems of the developing individual. In other words, this is where the immediate systems of influence (e.g. the family, university, peers, and community) overlap and interact. This interaction creates a cooperative effect or socialization consistency (Benson et al, 1998) which serves to either inhibit or promote the influence of the developing individual. Settings in the micro- and meso- systems are referred to as proximal processes, as they directly influence and are influenced by the individual. The third level is the exosystem, which contains the settings of processes. These settings do not contain the developing individual, but rather have an indirect influence on development. Examples would include the parent's work place, university politics, trustees, and or academic support units. Activities

at the parent's workplace may indirectly affect the student's economic situation, and governing laws enacted by the trustee board may affect or restrict student's behavior while enrolled in school. The last level, the macrosystem, encompasses the three sub systems, and embodies the attitudes and practices shared in the larger society as a whole (Muus, 1996). Muss argues that the exo- and macro- systems are distal processes, as they have indirect influences on the developing individual.

While Bronfenbrenner (1989) focused mostly on the structure of the human ecological model across time, as it undergirds the systemic interactions, Bubolz and Sontag (1993) concerned themselves primarily with the process of the interactions across systems, as they directly influence the development of the individual and family. The family's characteristics and attributes influence how and with whom interactions and process take place, thus structuring interrelations with other settings in the environment. The characteristics of the family include ethnic identity, structure, demographics, socioeconomic class, and history. These family traits and interrelations with other systems set a precedent for influencing the developing individual's behaviors, attitudes, values, and interactions with the environment. For example, Hill (1999) asserts that African American families traditionally have strong work orientations. Therefore learning marketable skills is encouraged as knowledge and ability are essential for access into the work setting. Consequently, academic achievement and school success become the gateway to enriched job opportunities and higher economic status.

In this way a strong work orientation influences African American students to value and to pursue an education.

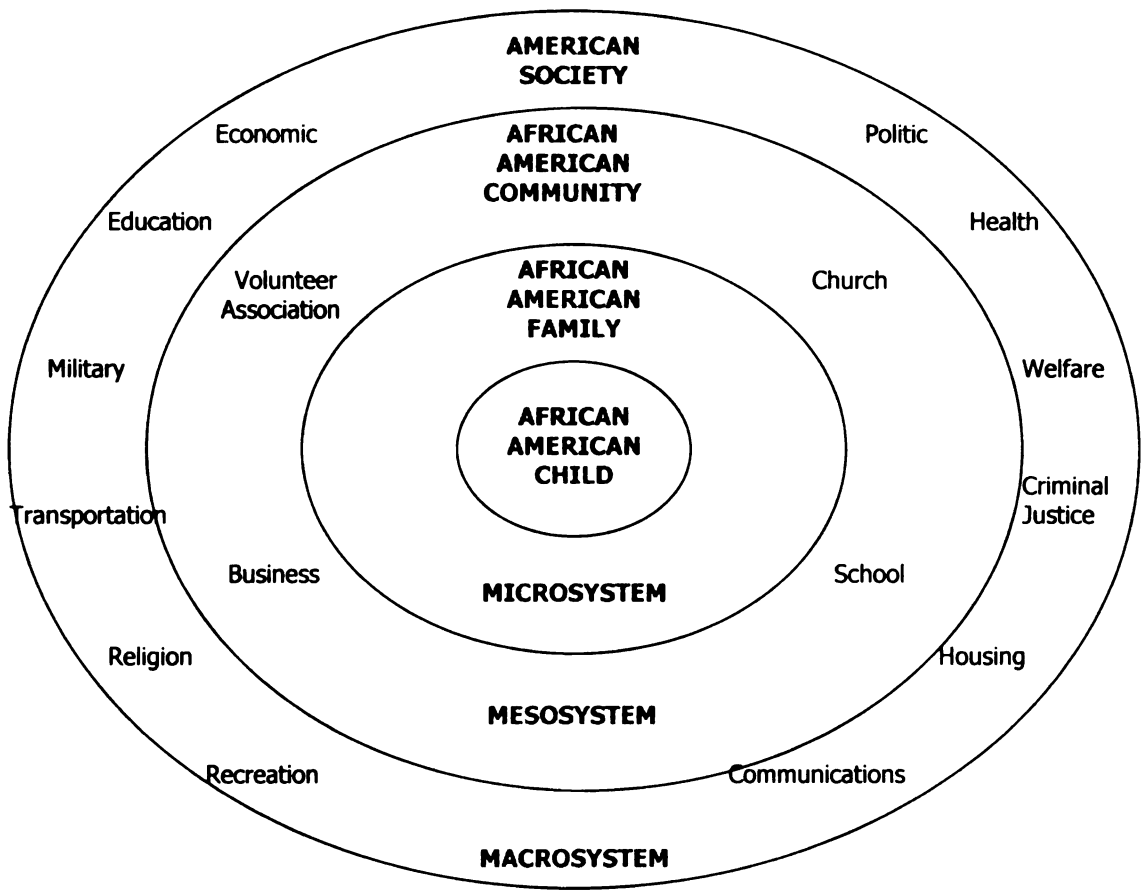
Ethnic ecologies. In the human ecology model, culture is depicted as the values, beliefs and attitudes of the larger society. Based on this theory, the culture embodied in the macrosystem guides the interactions of the smaller encompassed systems. In the United States, the larger societal culture is middle-class Eurocentric. When the smaller immediate systems encompassed by the Eurocentric macrosystem are specific to African Americans, a cultural discordance or inconsistency of socialization (Benson et al, 1998) is created. At which level this discordance registers or impacts the subsystems is based on the depth of the interactions of the African American individual with the larger White society, and the ability of the intermediate systems to mediate. For example, in the adapted social-ecological system model depicted in Figure 3, Billingsley's (1992) ethnic and holistic perspective is related to Bronfenbrenner's (1979) ecological model. The microsystem is the African American developing youth within the African American family, the intermediate system is the African American community, and the macrosystem is the larger White, majority society. Billingsley's model is considered ecological as it considers the interrelations between the developing child and his/her environments, despite his lack of identified meso- and exosystems. Figure 3 depicts the African American child as being sustained and supported by the African American family, who in turn is surrounded by, sustained by and interrelates with the African American community, which is surrounded by the larger American society. In this model,

the intermediate systems of the family and community structurally support and shield the developing child. Any incongruent messages from the larger macrosystem to the developing child, are filtered by the intermediate systems, and those that may be negatively influential (e.g. racism), are diminished by the dynamics of the intervening family and community systems. In Billingsley's model, the ecological structure serves to lend support and protection to the developing African American youth. It is important to note that this web of influence may remain intact through the developmental stage of late adolescence/young adulthood, although the ecological structure may shift because as college students individuals no longer reside in their protected nests.

Insert Figure 3 about here

As noted previously, the ecological structure is also influenced reciprocally by the individuals. As the individual develops and begins to move more independently among society, as ethnic minority families move from homogeneous to heterogeneous communities, and conversely as the larger society increasingly encroaches on the family, the ecological settings, processes and interactions, shift to adapt. In other words, as the individual develops and changes physical settings, the childhood family and community discontinue to serve as intermediate systems, and the individual assumes roles having more direct interactions with the larger societal systems. As changes in ecological settings often occur synonymously with developmental stage advancement, we

Figure 3
A holistic perspective. Adapted from Billingsley (1992) and Bronfenbrenner (1979).



can expect the developing individual's settings to change as they move through the stages of childhood, adolescence and young adulthood. So, for the African American young adult leaving the home of the African American family and community to attend a predominantly White college or university, concerns may arise regarding the shift in ecological processes and interactions, and the provisions of support, sustenance, and mediation.

Other ecological models specific to African Americans (Harrison et al, 1990; Nsameng, 1993) note that socialization of the Black child hinges on interdependence with family and community and the development of adaptive strategies that counteract negative aspects of the larger social context. Adaptive strategies are cultural patterns of personality characteristics and social behaviors that promote the survival and well being of the individual, family, and community. Those found most common among the four major ethnic minority groups of African Americans, American Indians, Asian Pacific Americans, and Latino/Hispanics are extended family, role flexibility, a bicultural orientation, and socialization goals that are focused on ancestral worldviews and values (Harrison et al, 1990). This commonality of strategies among ethnic groups suggests that culture influences the strength-based processes used by the proximal systems - individual, family and immediate community - to successfully interface with the distal system of society.

Developmental ecologies. The changes to the ecological systems corresponding to the developing individuals also mean a change in dynamics, regarding the structure of the systems and the force of influence. In some

instances, once distal processes may become more proximal and immediate influences may become more distant. Such may be the case for African American college students living away from home and attending a predominantly white institution of higher education. As a developing child and youth, the roles were more dependent upon the immediate system of family (e.g. son/daughter). As a college student living away from home, the subsequent roles are more independent, and the immediate system of family is replaced by university influenced systems (e.g. peers, community of residence members, and school faculty and staff). As a result, college students must readjust their roles and settings, or reconstruct their communities to reflect the structure of new proximal influences and the need for different processes and interactional strategies.

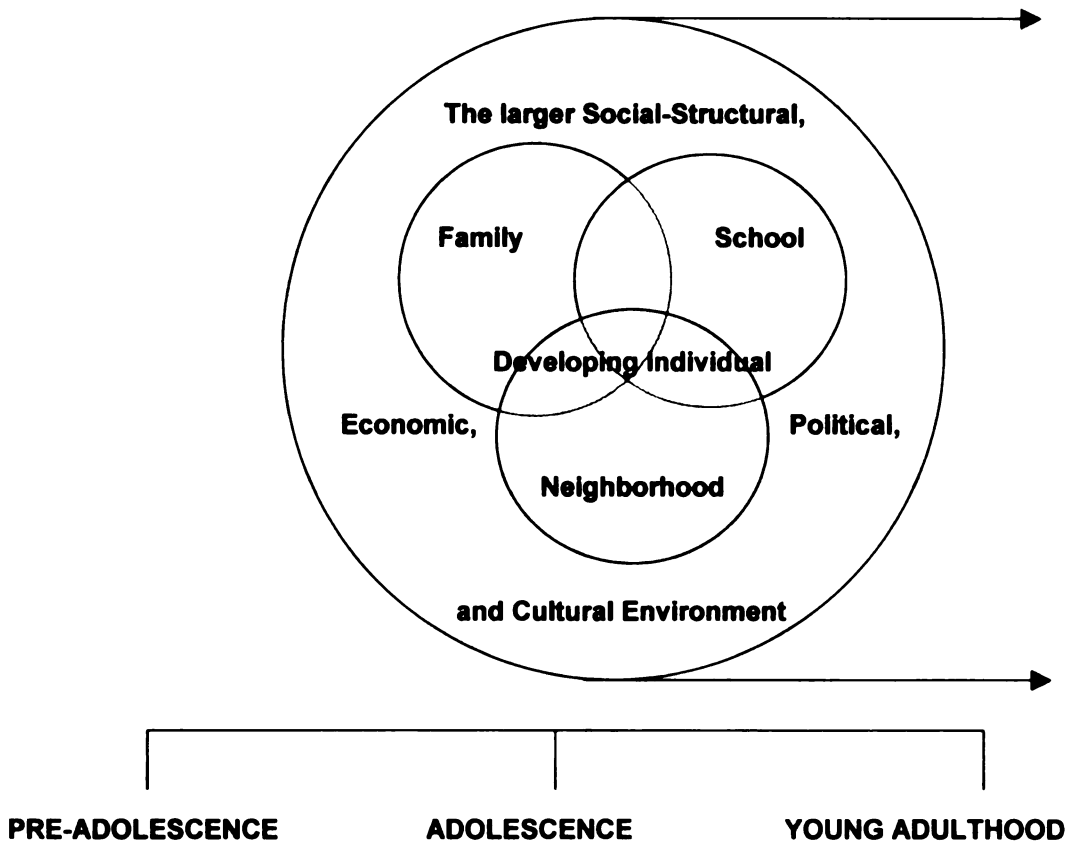
Jessor's (1994) chronosystemic and ecological model of adolescent development depicts the growing young person over time, within the overlaps of his/her immediate environments (i.e. family, school, and environment) and the contexts of the more distal environments (i.e. social structure, economics, politics and culture). The model is shown as spheres of contexts interrelated within one large macrosystem as they move together as one entity across a time continuum. Figure 4 depicts each of the immediate systems as equally including the individual and overlapping with the other immediate systems. Each system is considered for its individual interactions with the adolescent, as well as its interactions with other proximal systems and the resulting concurrent influences upon the adolescent. Influences of the immediate environments must also be considered in light of their placements in and interactions with the larger socio-

structural, economic, political and cultural environment. Overall, the model is depicted as moving across a continuum of time, from adolescence to young adulthood, recognizing the developmental processes in the individual self as varying the individuals placement and interactions with the environment. The continuum of time also allows for time-related changes to the environmental contexts (e.g. political leadership and policies, and societal events). It is important to note that as the model moves across time, corresponding with the individual's development, the immediate structures shift and change their positions in relation to the individual, other systems and the macrosystem. The change in time and space influence the prominence and scope of the system's continued influence on the developing individual. Concurrently, the developing individual is also forced to shift his/her perceptions, roles, strategies and systems of support, in order to restore equilibrium. Dornbusch (2000) notes that any type of transition causes a breakdown in habitual patterns of perceptions and activities, forcing the development of new behaviors to fit the new circumstances.

Insert Figure 4 about here

Some theorists disagree with the assumption that an individual's perceptions or psychological strategies of support must be adapted to coincide with development. For example, Tubbs and Boss (2000) note that the concept of psychological presence may operate strongly enough to keep the former immediate systems proximal despite their physical shifts to a more distal position.

Figure 4
Context and Development over Time. Source: Jessor, 1993.



Therefore, in theory, the family remains an immediate influence on the college student despite the student's physical distant from home. This theory is based on the developmental and psychological maturity of the individual. Whereas, an adolescent may be perceived as needing to keep the family in physical proximity, a young adult is considered to keep the family proximate through the development of a strong and mature psychological presence. However, others would argue that few college age students (18-23) have the maturity necessary to prioritize the influence of psychologically present systems, in the midst of other social environments (Jessor, Donovan & Costa, 1994). Rather, college students are in a stage of adolescence which becomes extended by the university culture and setting (Bocknek, 1980; Moffatt, 1991). This stage of development is often referred to as post or late adolescence rather than young adulthood.

Human development: young adulthood or late adolescence

Bronfenbrenner (1979) defines human development as the phenomenon of constancy and change in the characteristics of the person at a particular point in time based on the individual's progressive and bi-directional interaction with the changing physical/social environments. As individuals progress from one stage of development to the next, their interactions with the environment correspondingly change to reflect this growing maturity. At each new stage of development, disequilibrium is created which causes individuals to incorporate the new structures with the existing ones in order to construct new perceptions adaptive to the next stage, and, to restore equilibrium (Terenzini, 1987). Thus interactional changes influence the individual's development, which in turn

influence the dynamics of interactions. However, there is a controversy over whether the stage of development corresponding to the ages of 18-23 should be referred to as young adulthood or late adolescence. Although some may argue that the choice of terminology is simple semantics, others would note that one's worldview of human developmental stages sets forth ones expectations for cognitive readiness and related stage tasks and behaviors.

On the one hand is Erikson's epigenetic theory of development which is based primarily on chronological age and developmental tasks (Erikson, 1993). His stages of man theory delineates the stage of young adulthood as beginning at age 18 when adolescence ends, and one is legally considered an adult. In adolescence, the tasks are to develop one's identity and a sense of confidence in who one is. Realized identity results in fidelity, sustained loyalties to values, strong sense of individuality and recognition of acceptance by society (Thomas, 2000). Perceived as a confident individual, the 18 year-old is ready to move on to addressing the tasks of the next stage of development, that of young adulthood. The tasks of this stage include the development of intimate, meaningful relationships with others, and commitment to a career.

On the other hand, there are those theorists who believe that the shift from the adolescent stage to adulthood should be based on the maturation process rather than a specific chronological age period (Bocknek, 1980; Rogers, 1972). They envision individuals entering adulthood when mature enough to assume the roles and responsibilities of full-fledged citizens in society. Rogers and Bocknek posit that this mature stage does not seem to occur for college students until they

have completed college and become income earners, at about age 23. College years are associated with extended adolescence, as the developmental focus continues to be identity formation, gaining independence, and becoming autonomous and self-reliant (Ryan & Lynch, 1989). As a result, the stage encompassing the ages of 18-23 is labeled late adolescence, the period when one transitions to adulthood.

While a number of students are reported to perceive college as being about adolescent autonomy, a time of self-governing and self-regulating fun and games (Moffatt, 1989), others see college as a stage for coming of age and progressing from adolescent to adult during four years of study. It is a window of opportunity for identity development, providing exposure to diverse thoughts and people, and opportunities to explore new roles and alternative views while en route to identity achievement and commitment (Wicklin, 1997). As a transitional period, late adolescence implies a sense of disequilibrium, for one is adjusting to changes brought about from the shift from one stage of development to the next. This transitional stage is further instigated by changes to the environmental settings specific to the college student's shift from high school to college, from family home to residence hall, and from roles of child dependence to roles of adult accountability and responsibility (McCray, 1992). Based on the influence of the transitions caused by these shifts, the college students of this study are perceived as emerging from adolescence into adulthood. The community's perceptions of and interactions with the college students influence their emerging self-identification.

Whereas the previous influences were focused on the processes of transition, other influences focus on the physical and social environmental setting. Astin (1999) focused on the latter category and how it influences development of the college student. His study of student involvement and investment in schooling as a predictor of learning, found that student psychological and physical involvement and investment was positively correlated to personal development and student learning. University policies and practices that foster student involvement in challenging activities and promote engagement with faculty, staff and peers served to positively affect student development. These practices also served to increase the student's fidelity to the university, thus enabling completion of Erikson's adolescent developmental stage task, and moving students closer to adulthood.

The college student, regardless of the label of being considered in the stage of late adolescent or young adult, is still developing or coming into his/her own (McCray, 1992). This transition of becoming is taking place on multiple levels: psychosocial, sexual, cognitive, emotional, moral, economical and for late bloomers, physical. Based on ecological theories, the college student's development is influenced directly by his/her immediate settings of family, peers, and community, and indirectly by pre-college attributes (Astin, 1999; Schmidt & Hunt, 1994). Pre-college attributes include student's social address or socioeconomic characteristics, as well as culture, high school setting (school size, school type, school diversity), high school grades and test scores, and parent's educational attainment. When the past and present settings are

ethnically or culturally congruent, interactions are predicted as being supportive of the individual's development. However, when the settings are ethnically or culturally incongruent, adaptive measures become necessary to support the college student's development and eventual success.

Culture

"Like a fish in water, culture surrounds an individual" (p. 363, Sussman, 2000). This fact often makes it difficult to distinguish between the nature of culture as being a descriptor of the supportive characteristics or a label for the process that governs one's thinking, beliefs and subsequent actions. Culture can be defined as ethnic designation, age, gender, individual and family demographics, beliefs, values, and behaviors. As a process, culture influences behaviors, beliefs and the formation of values. Furthermore, culture is influenced by such factors as time, geography, economics, history, gender, learning and politics. For example, the status of college student denotes a particular culture. The school type and size, location, politics, characteristics of the students and historical era influence the college student culture. In turn, the college student culture influences students' values, academic behaviors, tastes in clothes and music, and beliefs (Moffatt, 1991). There are also subcultures within the larger college culture and on each campus, based on class standing, gender, major, and ethnicity. While noting the importance of considering cultural influences on development, Bronfenbrenner (1988) also warns that simplistic cultural groupings become social addresses and may assume errant consensus if the interaction of contexts is not taken into consideration.

African American Culture. Skin color, African ancestry and a history of forced immigration to the United States designate African American culture. Although Blacks have come to the United States from a number of different countries, the majority designated as African American were "forced to immigrate" when brought over as slaves from Africa (Ogbu, 1992). As involuntary immigrants (Ogbu, 1981), African Americans historically have had limited opportunities and resources. However, the race as a whole, has remained resilient in spite of sub-optimal conditions and opportunities resulting from the long-lasting effects of racism, oppression, and poverty. This resilience has been credited to a worldview that emphasizes the strengths of religious beliefs, faith in those beliefs, family bonds, extended kinship networks, communal support, work ethic, and education orientation (Billingsley, 1992; Boykin, 1991; Hill, 1999; Hines & Boyd-Franklin, 1982; Hudgins, 1992); and the ability to remain flexible and adapt to diverse roles for the purpose of survival (Billingsley, 1992; Harrison et al, 1990; Hill, 1999).

The African American culture influences family structure, individual development, economics, social interactions and coping skills. In a process referred to as enculturation (Barker & Hill, 1996), the cultural values and practices of families are transmitted from one generation to the next. The transmissions occur through experiences, ethical teachings, modeling, and interactions with proximal processes. As a result, African American children learn identity, self-esteem, and autonomy as they develop into mature individuals that are interdependent with their family and community.

In Billingsley's model (Figure 3), the most immediate proximal influence for the developing African American child is the African American family. Both the child and family are surrounded and sustained by the Black community, which in turn serve as a buffer for interactions with the larger White society. Using this model, the assumption is made that prior to college, the developmental niche (Super & Harkness, 1986) for African American students was central to, congruent with, and supportive of the student's culture. However, the advancement to college may cause a shift in the structure of the immediate settings. This is especially true when African American students leave home to reside at and attend a predominantly white institution of higher education. In effect, the Black student's ecological placement shifts outward, crossing over the protective boundaries previously provided by the family and communities into a microcosm of the larger society in the form of the predominantly White university (Epps et al., 1991; Swanson & Spencer, 1999). This new setting can result in the loss of culturally congruent proximal support systems, increased stress, and a higher reliance upon developing new support systems and/or individual strengths (Dornbusch, 2000).

The predominantly White university culture. The frame of reference and contextual and social influences of the immediate settings have major bearing on the development of late adolescents. As an entity, institutions of higher education have a culture, recognizable standards of expectations, and patterns of behavior that govern, require and evaluate specific beliefs, knowledge, competencies, and skills (Ogbu, 1999). These standards and behaviors are

influenced and shaped by the cultural norms of society. For "predominantly White universities", the term generally reflects the racial composition as well as the pedagogical beliefs. The frame of reference for predominately White institutions of higher learning tends to be Eurocentric and middle-class, with emphasis placed on independence, competitiveness, youth, and intellect in the areas of math, science and linguistics (Boykin, 1991; Feagin, Vera & Imani, 1996; Kunjufu, 1986; McLoyd & Steinberg, 1998). Logic is primarily dichotomous, either one or the other, right or wrong (Baldwin & Hopkins, 1990; Nichols, 1976), hence the prevalence of standardized tests requiring convergent thinking and one correct answer. By contrast, the African American culture emphasizes interdependence and communalism, cooperation, respect for maturity and elders rather than admiration of youthfulness, and spirituality (Boykin, 1991; Kunjufu, 1986; McLoyd & Steinberg, 1998). Logic is diunital, the consideration of both sides, and the union of opposites (Baldwin & Hopkins, 1990; Nichols, 1976), often resulting in high scores on tests of divergent thinking (Hayles, 1991; Nemeth & Kwan, 1985). It should be noted that these cultural dimensions are foundational pillars of historically Black colleges and universities (Allen, 1992; Allen, Epps, & Haniff, 1991; Pascarella et al, 1996). In the predominantly White academic setting, the Eurocentric viewpoint is typically set as the standard for evaluating all student academic performance and educational learning (McCubbin et al, 1998), and any deviation from the norm is often considered to be substandard. Not surprisingly, students of color are often judged to be at a deficit.

The culture of the university setting affects pedagogical beliefs regarding expectations of student abilities and learning climate (Davis, 1998; Feagin et al, 1996). When pedagogical beliefs regarding the intellectual abilities of Black students reflect a bias, a climate of prejudice and discrimination is established (Cabrera et al., 1999). Such climates are nonsupportive of student learning, and serve as promoters of psychological and socio-cultural stressors (Astin, 1999; Wilson & Stith, 1993). On such campuses, faculty members are often perceived as expecting less academically from Black students believing them to be intellectually inferior as a result of test scores normed on White students. Low expectations have been shown to result in decreased student interest, few opportunities for faculty-student interaction, and minimal student involvement with academic activities which encourage matriculation and achievement (Astin, 1999; Cabrera et al, 1999). Attrition and eventual withdrawal are increased when students perceive the learning climate as prejudiced and discriminative. College climates that foster positive experiences through support for academic achievement, sense of community and adjustment to college, subsequently encourage social-psychological growth persistence and degree completion (Cabrera et al, 1999; Pascarella et al, 1996).

As noted earlier, the term "predominantly White university" refers to the racial composition as well as the pedagogical beliefs. The term ethnic minority is used to indicate that the numbers of individuals belonging to a specific racial or ethnic category are few. At MSU, the student racial composition is 15.6% racial and ethnic minority (Harrison, 2000). Sussman (2000) asserts that cultural

distinctiveness increases the salience or central influence of one's socio-cultural identity, specific to racial differences, especially at points of cultural transition or conflict. Cultural identity salience influences behavior conforming to the cultural identity. Interestingly, ethnic and cultural identity may not have been a primary concern for the developing individual prior to entering the racially diverse college setting, whereas now it takes precedence. Sussman also notes that members of the dominant group may experience role confusion contrasting to the identity salience experienced by members of the minority group. Subsequently, the salience of the one group and the role confusion of the other affect the campus climate, cultural perceptions, interactions and influences.

For African Americans, predominantly white institutions of higher education represent a context that may or may not be congruent with their cultural values, norms, and beliefs. Some would assert that the context has primary influence on behavior and outcomes, and therefore the individual needs to adapt to the environment. This could account for the African American college students attending predominantly White institutions of higher education who assimilate to the context by completely renouncing the values, norms and beliefs particular to Blacks in favor of "acting White" (Fordham & Ogbu, 1986). At the other extreme, are African American students who choose to attend historically Black colleges and universities because they are perceived to preserve and support their cultural values, beliefs and practices, and thus, provide a congruent ethnic context (Allen et al, 1991; Chavous, 2000; Pascarella et al, 1996). However, these examples are extremes. There are still numbers of African

American college students who attend predominantly white institutions of higher education and try to maintain an equilibrium or reciprocal relationship between their cultural beliefs and their context. Equilibrium supports acculturation, allowing the African American college student to retain the cultural strengths or assets of one's ethnic/racial identity, while learning to successfully interact within the incongruous context of the predominately White institution.

The African American college student

Previously it was noted that ethnicity, developmental stage, and ecological context influence a student's development. In this study of African American college students, cultural focus is being placed on age and ethnicity of the students within the context of the predominantly White university. Ethnicity influences students' worldviews, perceptions of society, and perceptions of how they relate to society (Baldwin, 1990; Gilchrest, 1994; Hatter & Ottens, 1998). Culture also influences age and stage of development, and effects one's behaviors, thoughts and maturity (Bocknek, 1980; Erikson, 1993; Jessor, 1993). Context is the systematic social variables presented by the setting and environment, which influences ecological and development (Lerner & Tubman, 1991). The three interacting characteristics specific to the African American college student influence perceptions, development, and behavior.

Although the majority of African American undergraduates tend to be between the ages of 17-23, their overall average age may be slightly higher than the mean age of White students. This is probably due to the fact that Black students are four times as likely as White students to require six to seven years

to complete a four-year degree ("More bad news," 1996/97). In a study of graduation rates conducted at MSU (MSU Women's Resource Center, 1999) only 6% of the Black students completed their degrees in four years. The five-year rate for completion was 27%. The six-year rate was 45%.

Regarding the stage of development, African American college students are emerging from childhood dependence and emerging into adult responsibility and accountability in the areas of self-identification, economic survival, socialization, decision-making, values, spirituality, and volition or will (McCray, 1992). This is a stage of human developmental transition and cultural transition. As a student, developmental emphasis is placed on cognition, thinking processes and learning for the purpose of facilitating economic growth. As an individual, emphasis is placed on the psychosocial areas of self-identification, decision-making, and autonomy. The African American culture emphasizes interdependence over independence, so autonomous growth and self-identification are expected to occur within social contexts of family, community, and culture.

As a stage of cultural transition, African American college student s are shifting immediate settings, thus affecting their roles, activities and relations to the immediate settings. For example, in the family setting, the developing individual was the protected and dependent child. Interactions with outside forces influencing the child's well being (e.g. the school staff and community members) were indirect, being filtered through the parents and other family members. In the college setting, the developing individual is seen as an independent and

autonomous being, expected to make decisions for self, and to act on his/her own behalf. As part of the transition to adulthood, students are expected to directly interact with school personnel and community members. Thus these settings become a part of the student's micro and mesosystems, displacing the proximal position of the family and other childhood related settings.

Based on Sussman's (2000) findings that culture becomes more salient in culturally incongruent settings, it can be hypothesized that culture does not play a primary factor in the developmental transition from dependent child to interdependent adult when the college setting is ethnically congruent with the family setting. However, when the two settings are incongruent, (e.g. having different values, perceptions of and expectations for the student) culturally adaptive strategies become pertinent to the student's ability to adapt to the new roles associated with the transition to adulthood in the college setting.

Imperative to the survival and successful transition of African American college students is the presence of positive-based culturally sensitive systems which protect and support the developing individual (Harrison et al., 1990; Ogbu, 1981). These cultural patterns of personality characteristics and social behaviors that promote the survival and well-being of the individual include (a) extended family, (b) role flexibility, (c) a bicultural orientation, (d) socialization goals, and (e) focus on ancestral worldviews and values (Harrison et al, 1990). These strengths were assumed to be present in pre-college years, as adaptive strategies commonly used by the family, community, neighbors, childhood friends, and congregation of faith. Now that the student has moved out of the

immediate physical realm of the settings that nurtured his/her growth through adolescence, new communities of support and adaptive strategies must be constructed corresponding to the student's age of development, gender, academic year, field of study and immediate physical setting.

Assets and Strengths

Adaptive strategies associated with ethnic minority families are akin to developmental assets (Benson, 1997; Leffert et al., 1998) and the strengths of Black families (Hill, 1999; Hudgins, 1992). Assets are defined as positive experiences and characteristics provided to developing individuals, thus enabling them to resist risk factors and achieve success (Scales & Leffert, 1999). The strengths of Black families are five basic adaptive strategies found common among and pertinent to the psychosocial survival and success of Black or African American families (Hayles, 1991; Hill, 1999). This study examined the assets framework through the lenses of the strengths of Black families, for the purpose of identifying assets most prominent and prevalent among African American college students, and most predictive of their academic success.

Assets. Search Institute identified forty assets related to their work on adolescent (12-17 years of age) development. The forty assets are arranged in two dimensions, external and internal. Each of the two dimensions further divide into four categories of assets. The external assets are boundaries and expectations, empowerment, support and constructive time use. The internal assets are commitment to learning, positive values, positive identity and social competencies. Finally, each category lists four or more specific assets for a

dimension total of twenty. Figure 5 lists the twenty assets that fall under the category of external assets and Figure 6 lists the twenty internal assets. The environments, which sustain the developing individual -family, community, school and congregation of faith - are considered responsible for providing the external assets. Their influence helps to model, support and nurture the individual's development of internal assets. In essence, assets are the positive experiences and supports provided to individuals by their environments and relationships, resulting in the development of positive characteristics, competencies, and internal values. Increased numbers of assets inversely correlate to risk factor behaviors and directly correlate to increased indicators for success.

Insert Figures 5 and 6 about here

Criticisms of the assets model include its age limits specific to the corroborating research, the preclusion that asset development is only provided from birth till age 18 years (Leffert et al., 1998), and its lack of consideration for cultural influences regarding the types, numbers and prevalence of assets. For the purpose of this study, the asset framework was interpreted through a cultural lens in order to provide a translation specific to African American college students (Lucero, 2000).

Strengths of African Americans. Strengths is the term used by Hayles (1991) to connote the distinctive ethnic capacities and competencies of African Americans. Strengths is also the term used by Hill (1999) to denote the adaptive

Figure 5
External Assets. Source: Leffert et al., 1998.

EXTERNAL ASSETS			
Boundaries and Expectations • Family boundaries • School boundaries • Neighborhood boundaries • Adult role models • Positive peer influence • High expectations	**Empowerment** • Community values youth • Youth as resources • Service to others • Safety	**Support** • Family support • Positive family communication • Other adult relationships • Caring neighborhood • Caring school climate • Parent involvement in schooling	**Constructive Use of Time** • Creative activities • Youth programs • Religious community • Time at home.

Figure 6
Internal Assets. Source: Leffert et al., 1998.

INTERNAL ASSETS			
Commitment to Learning • Achievement motivation • School engagement • Homework • Bonding to school • Reading for pleasure	**Positive Identity** • Personal power • Self-esteem • Sense of purpose • Positive view of personal future	**Positive Values** • Caring • Equality and social justice • Integrity • Honesty • Responsibility • Restraint	**Social Competencies** • Planning and decision-making • Interpersonal competence • Cultural competence • Resistance skills • Peaceful conflict resolution

strategies that help African American families to be resilient and to overcome. Hill notes five strengths specific to the African American family: faith, kinship bonds, role adaptability, work ethic and academic orientation. Although separate components or strengths, they are perceived as interacting reciprocally (Alston & Turner, 1994). The chart in Figure 7 provides an overview of the five strengths and their defining constructs. Each of the strengths are respectively explored further in the text following.

Insert Figure 7 about here

Faith and religious orientation. Hill (1999) operationally defines faith as a strong religious attitude, belief and commitment to those beliefs. Faith emphasizes a positive outlook for the future, increasing the ability to persevere and endure (Alston & Turner, 1994). Specific to the developing student, faith makes meaning and derives value from life (Wicklin, 1997). Based on the work of Fowler, faith, for the college student, may be deeply held and strongly felt, but untested. In other words, students may report having strong faith or religious beliefs, yet their beliefs are not applied to their actions.

Among Black Americans, spirituality and the Black church are found to be major sources of social support and determinants of future success (Hill, 1999). The majority of all Blacks report regular involvement in religious activities. Approximately 75% of all blacks belong to a specific church; over 65% report attending church regularly, at least once per month; 93% report praying

Figure 7
Defining Constructs of Hill's (1999) Strengths

Black Family Strength	Defining Constructs
Strong Faith	• Strong religious attitude, belief, and/or commitment • Involvement in religious activities • Social support and resource • Positive outlook for future • Perseverance and endurance • Meaning of life
Strong Kinship Bonds	• Kinship networks • Extended family relations • Significant non-related persons • Support and assistance from relatives • Family and community networks • Ties based on common residence and/or common future plans
Strong Role Adaptability	• Flexible roles • Multiple roles and involvement • Adult role models • Holistic perspective • Enhanced sense of self-worth and self-esteem • Develops, problem solving and life skills • Assumes responsibility
Strong Work Ethic	• Future orientation • Self-management skills • Improved self-reliance • Increased neighborhood stability • Entrepreneurial and self-employment abilities
Strong Academic Orientation	• High educational and occupational aspirations • Educators who assist in attainment of aspirations • Parental participation • High educational and occupational expectations • Broad range of social and economic support • Positive role models • Socialization skills • Socialization activities and programs • Healthy social relationships • High self-esteem • High academic performance

frequently; 82% watch or listen to religious programs; and 74% read religious material. Religious participation is directly correlated to increased levels of educational attainment, increased levels of economic advancement, marriage and family survival rates, and lowered incidences of substance abuse and other risk factors (Hill, 1999; McAdams, Booth, & Selvik, 1981; Steward & Jo, 1998).

Kinship Bonds. Kinship bonds are the extended family relationships and ties forged by shared blood and genetics, shared sociocultural pasts and future plans, and or similar life experiences (Alston &Turner, 1994; Hill, 1999). Billingsley (1992) notes that kinship ties are the intimate relations formed with other people who are related by blood, marriage, formal and informal adoption, appropriation (unions based on decision i.e. "fictive kin"), common residence, or shared social structure. Kinship bonds are akin to social capital; relationships and networks that provide resources to community members for effective living. Kinship bonds imply a communal connection and support for members of the family.

For students, kinship bonds include the blood ties to the family of origin, as well as ties to roommates, sorority/fraternity members, mentors, faculty, staff and local church members. This new community or fictive family provides role models, support, connections and opportunities to share concerns and to help others. Kinship bonds provide the foundation for flexible roles.

Role Adaptability or flexibility. The ability to adapt to the responsibilities of one's life conditions increases the probability for survival (Alston & Turner, 1994; Hill, 1999). Role adaptability requires flexibility in the perceptions of one's duties

and roles in regards to the subsistence of the individual and family. Whereas in some cultures, familial roles are strictly adhered to and determined by gender and age, the inclination of Black families is to modify prescribed roles for the benefit of the family. For example, single-parent Black families have often succeeded against odds, because the mother adapted her parental role to include duties attributed to the father as head of the household. While she worked, a grandparent, aunt, uncle, neighbor, or older sibling may have taken on the role of mothering to care for the younger children. Or in some cases, older school-aged siblings took on jobs to help contribute to the economic running of the household.

On a positive note, role flexibility has been found to increase resilience and adjustment to adverse life conditions, decrease tension and role overload, and promote self-esteem. Adaptability in roles is perceived as a coping strategy which may account for the flexibility of cognitive structures among ethnic minority students (Wilds, 2000). This flexibility increases divergent thinking, problem solving, and perceptions of evaluation criteria. However, role adaptability has been found to have negative consequences as well (Hill, 1999). For instance, role confusion may result for the parentified child: the older sibling who takes on the responsibility of caring for younger children in the family or contributing to the economic survival of the family. For college students who work to help finance their education, tensions arising from excessive work hours and student responsibilities may create conflicts that result in having to choose one role at the demise of the other.

Work Ethic. Hard work, as well as academic achievement is perceived as the avenue to economic mobility, and therefore a strong work standard or principle is common among Black families (Hill, 1999). Despite myths that Blacks do not want to work and would rather collect welfare, McCabe and Barnett (2000) concluded from their study of African American adolescents that securing a future career was deemed more important than establishing future relationships. Hill also notes that Blacks have always worked although most are in underpaid labor positions. Statistics show that the majority of Black families currently work, and 52% of Black families listed as living below the poverty line in 1989 did not receive public assistance, even though eligible to do so. This is accredited to emphasis on self-reliance and unwillingness to be a part of the welfare system. In addition, Blacks were found to be more willing to take on lower paying jobs than Whites, to be employed as laborers or unskilled workers, and to actively seek employment even after multiple rejections (Aston & Turner, 1994).

While a strong work orientation is noted to improve self-reliance and self-worth, and, to provide opportunities for economic and social mobility, for the college student work can prove to be both an asset and a risk factor. As an asset, part-time work on campus and/or related to the student's field of study can serve to increase the student's interaction with peers and faculty, thus promoting ties and commitment to the school and academia (Astin, 1999). On the other hand, Astin also notes that as students work more hours, they reportedly studied fewer hours, attended fewer classes, and or achieved lower grades.

Consequently, they were more likely to drop out or take longer to complete their graduation requirements (Brawer, 1996). A negative relationship between work off-campus and academic achievement was also found (Astin, 1999). As students worked more hours off-campus, they were less likely to reside on campus, have the time to get involved with campus activities or connect personnel, and to perceive a need for academic studies.

Academic Orientation. High academic orientation is the aspiration and commitment towards educational achievement (Hill, 1999). It is the behavior that supports the attitude of commitment towards academic achievement, the energy devoted to the academic experience (Astin, 1999). Hill further defines academic orientation as having six components. (a) Black parents, teachers, and society have high educational aspirations for Black youth. (b) Black students have high aspirations for self that are supported by their beliefs and practices. (c) Peers approve, support, encourage and in most cases share student's goals and aspirations. (d) Students have high self-esteem. (e) Students have a strong personal racial identification and a dual reference (multiracial worldview) or in-group (pro-Black) orientation. And (f) students have both high internal and external locus of control. The internal locus supports personal orientation and aspirations, providing the student with the belief that they can accomplish whatever they aspire to, while the external locus is the recognition that outside forces help determine the achievement of the internal locus. High levels of both are considered to provide optimal adjustments to discriminatory ideologies and practices.

In a study specific to the academic achievement of African American youth (Cose, 1998), faith, parental and community support, mentors, and productive involvement in community were also found to be components of educational success. A strong academic orientation includes a commitment to learning, time spent studying, active participation in student organizations, and frequent and meaningful interactions with faculty members and other students. Along with a strong work ethic, academic orientation is seen as the avenue towards economic and social mobility.

Reconstructed community of support. Although not included as an asset or culturally recognized strength, an additional adaptive strategy specific to the African American college student attending a predominantly White institution of higher learning is the development of a reconstructed community of support. This would include the physical residence while attending college, social networks (e.g. peers, and specific student groups and organizations), academic networks (e.g. academic advisor, departmental faculty and staff), and work setting-based relationships and interactions. When the student shifted from adolescent to late adolescent, and from residing at home to attending a residential school away from home, the structures of the micro- and mesosystem consequently changed, requiring that consistent structures be adapted and new ones be created to support the continued development of the individual.

Reconstructed communities that emphasize the salience of the campus and the attainment of education facilitate involvement in campus activities, commitment to the school, and retention (Astin, 1999). However, retention tends

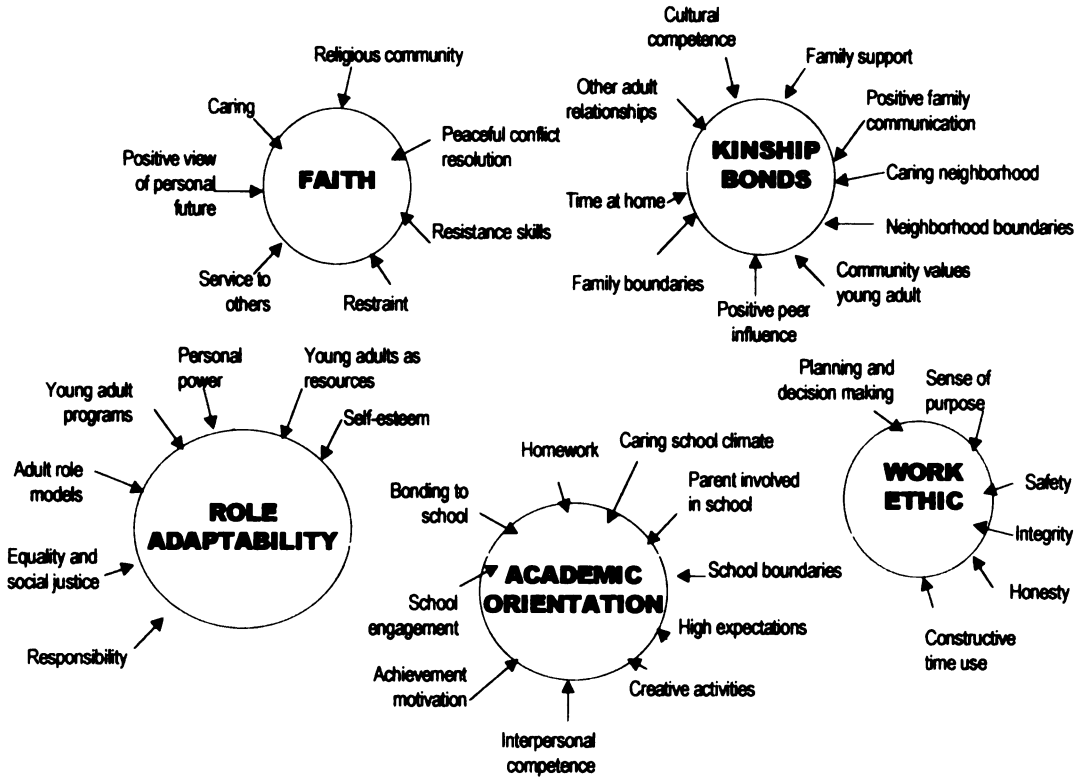
to suffer when students move off campus, and or find full-time employment or are employed off-campus, as campus involvement decreases.

Synthesis of strengths and assets

For the purpose of this study, Hill's strengths categories were compared with Search Institute's assets to establish a model for examining the assets of African American college students. Assets are the positive characteristics and experiences provided to developing individuals and enabling them to resist risk factors and to succeed. Although assets research has been specific to adolescents, its basis in human development theory has provided researchers the basis for examining assets at other stages of development (i.e. early childhood, school-age, and parenthood) (Leffert et al., 1997; Roehlkepartain & Leffert, 2000). Strengths, as discussed here, are the cultural assets of African American families: the characteristics and experiences provided to Blacks enabling one to be resilient and successful. An integrative model was conceptualized in Figure 8, which compared the defining constructs of strengths with the 40 assets. Based on face validity, the forty assets were regrouped under the categories of faith, kinship bonds, role adaptability, work ethic and academic orientation. This model provided a basis for exploring and investigating the assets of African American college students specific to academic achievement.

Insert Figure 8 about here

Figure 8
Conceptual Integration of Assets and Strengths of Black Families. Adapted from Hill (1999) and Leffert et al (1998).



Academic achievement and success

This study examined assets within ethnic and developmental framework to determine their influences on the academic achievement of African American college students. Academic achievement is a concept typically measured by grade point average, the receipt of academic honors, awards and scholarships acknowledging high scholarly accomplishments, and continued matriculation and graduation. Cokley (2000) states that grade point average, as an indicator of academic success was more significant for Blacks attending predominantly White institutions than for Blacks attending historically Black colleges and universities. For the latter group, success was better discerned by the quality of the student's interactions with faculty. Academic achievement may also include measurement of student involvement in activities related to one's major field of study, internships, support and high expectations for success, aspirations for success, and career goal plans (Jackson & et al., 1996; Sedlacek, 1987; Stamps, 1988). The ability to successfully relate to and interact with one's environments is equated with academic achievement, college retention, graduation, and the realization of career plans (Astin, 1999).

Studies of academic achievement have focused on the measurements of success, as well as components that influence, support, and encourage readiness to achieve and academic attainment. For example, factors that contribute to perceived readiness to excel academically include pre-college attributes of high scores on scholastic entrance exams, high school setting, and parents' educational attainment (Delicio & et al., 1993; Sherman, Giles, &

Williams-Green, 1994). Environmental parameters that influence academic achievement include size of school, type of school (public or private), geographic location of school, campus resources (library, computer, transportation), diversity of the student body and representative diversity of faculty, and perceived climate of the school (Allen, 1985; Wiley, 1989).

A number of researchers identify multiple factors as attributing to the academic success of African American students. Maton and Hrabowski (1995) found academic success to be related to a balanced integration of academia and social involvement, interactions with and support from the school environment by way of school personnel monitoring and advising, and self motivation. Hayles (1991) attributes academic success to an achievement and future oriented personality, motivation to achieve nurtured by family and friends, strong ethnic identity and self-determination, and value for social equality and independence for all. In a study of academically successful Black youth, Cose (1998) questioned graduating high school seniors about their lives and the traits that helped them to achieve success. The characteristics of parental support, adult mentors, strong faith and productive involvement with the community were reported as key components.

Also found was a number of studies that placed focus on the hindrances to achievement and the factors that contribute to attrition and school drop out rates. These studies focus attention on attrition rates and causes, low grades, low retention rates, and lack of direction and commitment to a particular major (Jackson & Malott, 1994; Lang & Ford, 1988), lack of support and

encouragement from institutional personnel, perceived climates of prejudice and racism, and low expectations. Steele (1992) states that more than half of Black college students fail to achieve academically because they are devalued: not treated as students possessing good prospects. Sadly, the studies specific to the academic achievement of African American students have tended to focus primarily on the negatives that lead to attrition and drop out versus the positives that contribute to academic success.

Studies of African Americans in Higher Education

There are four noticeable trends with the majority of research pertaining to African Americans in higher education. Studies are comparative, conceptually biased, deficit-based, or lacking in consideration of contextual influences. First, and in most cases, studies are focused on, and normed on, White students. Black students are frequently used as a comparative group in these studies, and in comparison to the contrast group appear to be less successful (McCubbin et al., 1998; Steinberg & Fletcher, 1998). Second, studies normed on White students and then used cross-culturally are conceptually biased, often lacking in cultural reliability (Knight & Hill, 1998; McLoyd & Steinberg, 1998). Third, most research specific to African Americans in higher education tends to be deficit based, focusing on the negative. Often times the highlighted shortcomings are attributed to genetic or cultural influences (Taylor, 2000) presupposing an inherent deficiency among the subjects. Finally, the Black students are usually viewed as existing in vacuums, devoid of contextual influences (Rowser, 1990), or on the other extreme, their social addresses (i.e. social economic status,

urban residence, or family structure) are over-represented as determinant contexts (Bronfenbrenner, 1988).

Comparative. Comparative studies usually contrast the measurement of one construct for one group of subjects against the measurement of the same construct for another group of subjects. Ethnicity, race, gender, class or primary language usually determines the groups. For example, there are studies which compare and contrast the worldviews of university students based on ethnicity (Baldwin & Hopkins, 1990; Berkow, Richmond, & Page, 1994; Cooke, Klopf, & Ishii, 1991), the perception of college campus climate relative to prejudice and discrimination (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999), and the risk behaviors of Black and White youth (Deater-Deckard, Dodge, Bates, & Pettit, 1998). Unfortunately, in a majority of comparative studies, a win-lose philosophy is established with one group being set as the norm for the construct measured, and the other groups being weighed against the norm. In most cases the norm group is the majority culture, and by default the compared minority group is found to be deficient.

When studies set the European American students as the norm, they consciously or unconsciously predetermine the ethnic minority's behaviors and attitudes as abnormal or deficient (Steinberg & Fletcher, 1998). Whenever a disadvantaged contrast group is set against an advantaged control group, the expectation is that the control group will appear more favorable, and consequently the determined disadvantaged student is found in default. Ironically, the same factors that distinguish the student as being disadvantaged

are often considered only as categorical controls, rather than examined as mediating factors. In other words, ethnicity or gender are viewed as categorical variables having little affect upon the predicted outcome. As a result, studies that compare Black and White students often negate the influences of cultural differences regarding beliefs, perceptions, values and behaviors. Studies specific to the matriculation and achievement of African American students have tended to be comparative (Cabrera et al., 1999; Heath, 1992; Sodowsky et al., 1994), and or deficit based being focused on attrition or retention problems (Jackson & Malott, 1994; Kobrak, 1992; Lang & Ford, 1988; Piotrowski & Perdue, 1998; Sailes, 1993).

Culturally sensitive equivalence measurements. Often times, the constructs defined within the norms of one group are not perceived the same by another group; therefore the measurement used to assess the construct is said to lack reliability across ethnic lines (Knight & Hill, 1998). For example, Lucero (2000) notes in her study of the cultural measurements of assets, that when the list of 40 assets were translated literally for use with Latino and Asian families, the essence of assets were lost, and the model was not accepted by the community. The forty assets were normed on studies conducted with hundreds of thousands of youth, of which 86% were White, middle-class, and suburban. As a result, the assets have a decided Eurocentric flavor, and the ethnic communities often lacked understanding of the importance of assets as building blocks of positive youth development. However, when the cultural concepts of each group were applied to the assessment and provision of assets,

communities were found to understand, adopt, and apply its concepts to promote the positive development of their youth.

Culture mediates cognitive understanding, perceptions and interpretations, values and behaviors (Guerra & Jagers, 1998; Kunjufu, 1986; Lucero, 2000). For example, Fassinger and Richie (1994) noted that when measuring achievement among Black and White women, the traditional definition of achievement was defined as high academic or vocational outcomes based on the perceptions of White middle class males. When the definition was adjusted to pertain to women, achievement was found to be multidimensional rather than a simple outcome measure. Also, further adjustments showed that the areas in which women achieve and the methods used to achieve varied across ethnic and socioeconomic lines.

Lacking in contextual and ecological influences. A number of studies of ethnic minority students list ethnicity and other demographics as environmental labels, without regard for how the environmental contexts might influence behaviors, attitudes or developmental processes (Rowser, 1990). Bronfenbrenner (1988) referred to these labels as "social addresses", noting that they provide information regarding a particular point in time, but often lack information regarding their influence as intervening structures or environmental processes. For example, in studies that measure psychological processes, it might be noted that the Black youth subjects reside in a female-headed single-parent family. This social address is often noted as synonymous with poverty, lack of resources, and lack of father influence. However, this assumption is often

untrue and lacking in validity. Without noting other moderating aspects of the environment (e.g. amount of contact with father, mother's employment, family income, marital status of parents and or family size), little relevance should be given to the conclusion simply based on the social address.

Deficit based. A number of studies regarding African American college students focus on the rates, causes and interventions specific to attrition (e.g. Allen, 1992; English, 1992; Jackson, 1996; Kobrak, 1992; Piotrowski & Perdue, 1998). These studies are considered to be deficit based, as they focus on the negatives, intervention and remediation of problems, rather than on the positives in relations to those who persist (Leffert, 1998). Very few studies actually focus on the successful African American students and the positive factors, which influence that success.

Studies show that ethnic minority students are those most likely to have high attrition and low retention rates (Brawer, 1996; MSU Women's Resource Center, 1999). African Americans tend to have the lowest retention rates of all the ethnic minority groups. One reason for this trend is attributed to a lack of sufficient socio-environmental support provided to the ethnic minority student by the university and community. Thus, if the university and community are committed to promoting the retention and graduation of all matriculating students it is important that culturally-focused, strengths-based research be conducted that identifies the achievement focused strengths and supports of the African American student.

Although the data provided may be factual, deficit based approaches lack consideration of the strengths and resiliency factors that influence African American students to achieve. Focus is placed on the percentage of African Americans that are involved in risk behaviors (Jackson & Malott, 1994), or who drop out (English, 1992; Kobrak, 1992; Piotrowski & Perdue, 1998; Sailes, 1993), rather than on the traits of those who do succeed. Deficit based approaches focus on what is missing and what needs to be fixed, rather than assessing what is right and working. It is a "glass half empty" philosophy. For example, Wilds (2000) notes that undergraduate enrollment rates for African American students rose to 39.8% in 1997, college graduation rates increased to 14.4%, and enrollment in graduate programs increased 10.0%. However, rather than focusing on the facilitators of the increases, comparisons were made to other minority groups, noting that despite the growth rates, African Americans still trail all other groups in either the percentage of increase, or in the attainment of degree. Emphasis on the deficits fails to provide a guide for promoting success. A strengths-based approach does not ignore the problems or concerns, but rather de-emphasizes them in favor of focusing on the positives proven to be successful. The belief is that by encouraging the positive the negative will consequently be remediated. Based on this assumption academic achievement might be better served if focus was placed on the characteristics identified with student success, rather than emphasizing the characteristics that are most typical of attrition (Allen, 1985, 1992; Jackson et al., 1996).

The present study was designed to negate the research problems mentioned above. It examines the cultural assets of African American college students within and ecological framework, for the purpose of identifying factors predictive of academic achievement. Assets is a strength-based developmental theory of promotion and prevention. The ecological foundation of this study provides consideration of contextual structures and interactions. Integration of the assets and strengths models provides a culturally sensitive equivalence measure that was normed on the Black college students.

Rationale for the Study

Based on insights from the literature review, this study investigated the ecological interactions of culture and assets specific to the academic achievement of African American college students enrolled in a predominantly White university. Previous studies regarding African American students have been first, focused on adolescents rather than college age students. As the two life span stages presume different physical settings and developmental tasks and expectations, the characteristics of the context specific to the college age student must be considered for its influences on behavior, values, and expectations. It is expected that as young adults college students exhibit the attitudes, behaviors, and values learned from their immediate systems of family, school, community, and church. According to ecological theory, these behaviors and attitudes shift to accommodate changes to the frequency and prominence of interactions between the developing individual and external systems. For example, when students enter college, the academic setting displaces the previous position of parents

and family. After becoming the proximal influence on the college age student, different external factors are provided to the college students causing adjustments to be made to the internal factors characteristic of the student, thereby influencing behavior. Studies are needed which examine the attitudes and behaviors of students in context of these developmentally inspired shifts in influences affecting internal and external characteristics and behaviors.

Second, a majority of studies regarding African American students have been lacking in cultural appropriateness in regards to assessing the impact of ethnicity on behavior and attitude. The designation of African American is more than a social address or control variable category. Rather it denotes a description of common attitudes, behaviors, experiences and racial characteristics. As Kunjufu (1986) notes, culture influences attitudes, which in turn influence behaviors. Studies are needed which consider ethnic cultural norms and examine their influences on individual and social behavior and attitudes.

Third, a majority of studies regarding African American students are concerned primarily with risk-behaviors and deficits. Even the examination of academic achievement has been deficit based and reactive, focusing on factors which contribute to attrition and those who fail to achieve. Strength-based studies are needed which examine the traits of the individual and the setting which are indicative of achievement.

Finally, a majority of studies regarding African American students have questionable validity and reliability due to being comparative or culturally biased.

Comparative studies use measures normed on White students to study Black students, usually resulting in the Black students being found deficient. Culturally biased studies assume one definition or correct answer for the construct measured, negating multiple responses and cultural influences on meaning. Findings from such studies may not be applicable to the population, as the measures may not accurately assess what it proposes to evaluate for that sample. Therefore, consideration must also be given to cultural influences on the development and norming of a measurement tool and to the ethnic makeup of the sample population.

This study attempted to address these four methodological/theoretical shortcomings by examining the influence of developmental stage and ethnic culture on the presence of assets and their effect on the outcome of academic success specific to African American college students. To measure the presence of assets, findings from an instrument developed to assess the assets of college students were analyzed, specific to the African American students. A culturally appropriate model was then developed based on the five factors of Hill's (1999) Black family strengths: faith, kinship bonds, role adaptability, academic orientation, and work ethic. Then, based on the literature review findings examining the interrelation of these factors, a structural equation model predictive of academic achievement was tested.

Four pathways were suggested for examining the interrelations of faith, kinship bonds, role adaptability, academic orientation, and work ethic, as indicators of academic achievement for African American college students.

Figure 2 (shown on page 12) shows the four path diagrams depicted on the overall theoretical model. Path A depicts direct paths from the five strengths to academic achievement, assessing the direct affect of faith, kinship bonds, role adaptability, academic orientation and work ethic on academic achievement. Path B is based on research that indicates students having strong religious beliefs and involvement, parental support, ability to adapt, and motivation to achieve to be more likely to build social networks that support academic achievement. Thus it is postulated that strong faith, kinship bonds, role adaptability, academic orientation, and work ethic would result in the reconstruction of a community of support in the college community setting. This reconstructed community would consist of peers, academic personal and resources, and university community members (i.e. faith-based leader and /or landlord), which serve to support the students in their striving for academic achievement. Path C diagrams the relationships between work ethic, academic orientation and role adaptability positively influencing the relation of students' employment to their field of study and the number of hours worked, which then positively influences academic achievement. This is based on research regarding student's employment which indicates that students with strong work ethics tend to believe in working to finance their educational goals and/or to gain hand's on experience were more likely to be employed or hold internships while attending school. When the position was related to the academic major, or on-campus, academic achievement was supported. When a strong work ethic was not combined with other strength factors, the resulting student employment was

shown to result in longer work hours per week, disassociation from school community and student role, and increased incidences of school drop out.

Hypotheses

Based on the literature review, six hypotheses were predicted.

Hypothesis 1: The assets or strengths of African American college students significantly differ from the assets of White students.

Hypothesis 2: The assets of African American college students significantly relate to the five strengths of faith, kinship bonds, role adaptability, academic orientation and work ethic.

Hypothesis 3: The five assets of faith, kinship bonds, role adaptability, academic orientation and work ethic are indicators of academic achievement (Path A).

Hypothesis 4: Students with strong faith, kinship bonds, role adaptability, academic orientation, and work ethic are more likely to reconstruct communities of support, thus increasing incidences of academic success (Path B).

Hypothesis 5: The assets of role adaptability, academic orientation, and work ethic influence the academic relatedness of student employment and the number of hours worked, thus influencing academic achievement (Path C).

Hypothesis 6: A strong work ethic positively encourages the number of hours students work and negatively affects academic achievement (Path D).

The chapter to follow explains the methods used to examine each of the hypotheses.

Chapter 3

METHOD

The purpose of this exploratory investigation was to identify assets most characteristic and indicative of academic achievement for African American college students. Of particular interest for this investigation was (a) the testing of a hypothetical model that incorporates ethnicity (i.e. African American), and (b) the development of a framework that examined the impact of institutional structures on the matriculation of ethnic minority college students. In order to carry out the objectives of this research most effectively, a descriptive cross-sectional survey design was explored (Fink, 1995).

Setting

Data for this study were collected as part of a larger study at a land grant state institution. With a total student population of 43,340 students (Harrison, 2000), approximately 15.6% or 6,771 of the students were listed as racial and ethnic minorities. Approximately half of ethnic minority students were identified as African American, based on the reported rate that 8.2% of the total student body was African/Black American (Hardy & Treadwell, 1999).

Participants

This exploratory investigation focused solely on the African American student responses to the Michigan State University Student Assets Survey (MSUSAS). At the time of this study, 1415 students had completed the MSUSAS. Of that number 178 or 12.6% of the respondents, were African American. This sample size provided an over-representation of the African

American student population at MSU, which was reported as 8.2% of the total student body (Hardy & Treadwell, 1999).

All responses used were from self-identified African American undergraduate students between the ages of 18 and 23 years. Students younger than 18 and older than 23 who responded to the MSUSAS were excluded from this study because they are viewed as being in different developmental life stages. This resulted in the exclusion of three students: two ages 24 and 25, and a third student who did not provide year of birth. Graduate student responses were also excluded as their experiences were considered to differ from those of the undergraduate student. This resulted in the exclusion of two students. In total, five survey responses were excluded, resulting in a total sample of 173.

Descriptives. Survey responses used in this study were from 173 African American students ages 18-23, which was 12.26% of the total respondents to the MSUSAS. All descriptive data for the samples were calculated from replies to the personal demographic section of the MSUSAS. Because of the limited number of African American students enrolled at MSU, the sample included a broad range of undergraduate students regarding class standing and age.

Table 1 shows the descriptives for all African American respondents, including the five students excluded for age or year of study classification. Students ages were calculated by subtracting the year of birth from 2000, the year the survey was completed. The mean year of birth was 1979, equaling an average age of 21 for the sample. Thirteen of the males, 59%, were 21 or 22 years of age. Fifty-one percent of the females were either 19 or 20 years of age.

Two respondents were 24 and 25 years of age, and one respondent incorrectly entered the year the survey was administered as the year of birth, resulting in a missing data entry. Students older than 23 and those with missing data regarding age were excluded from this study as they are considered to be in a different developmental life cycle stage than the 18-23 year olds.

Insert Table 1 about here

The responses over represented the female student population, which is 53.7% overall on campus (Estes, 2000). Only 12.4% of respondents were male. Of the students excluded from the final study due to age greater than 23 years, or graduate student standing, two were male and three were female.

Checking the appropriate box coinciding with freshman, sophomore, junior or senior indicated class standing. Graduate students were not intended to complete the survey, and there was no box for them to check. However, two graduate students did respond, both writing in their class standing on the side of the instrument. Despite both graduate students being 22 years of age, they were excluded from this study, as it was perceived that their college experience would differ from the experiences of the undergraduates. Sixty-one percent of the undergraduates were either sophomores or juniors. The large sophomore representation was expected as the MSUSAS was initially disseminated solely to the sophomore population.

Table 1
MSUSAS African American Sample Descriptives. N=178.

		Sample Size	% of All Survey Responses
Total		178	12.57%
Year of Birth	Age		
1982	18	11	06.2%
1981	19	45	25.3%
1980	20	39	21.9%
1979	21	44	24.7%
1978	22	30	16.9%
1977	23	6	03.4%
1976	24*	1	0.6%
1975	25*	1	0.6%
Missing data*		1	0.6%
Gender			
Male		22	12.4%
Female		156	87.6%
Class Standing			
Freshman		49	27.5%
Sophomore		61	34.3%
Junior		42	23.6%
Senior		24	13.5%
Graduate*		2*	1.1%*
Residence while attending MSU			
Residence halls		138	77.5%
University apartments		18	10.1%
Off-campus housing		20	11.5%
Parents home		2	1.1%

* Students excluded from the study due to age or graduate student standing.

Table 1 also shows that 88% of the 178 responses lived in university housing: 138 in the residence halls and 18 in student apartments. Twenty students lived off-campus. Only two students maintained residence with their parents while attending school.

This study was inclusive of all students who indicated their ethnicity as being African American. The MSUSAS item for ethnicity provided for multiple answers, thus allowing students of multiple ethnicities to check all applicable categories. Of the student sample, N = 173, 15 students inferred they were multiracial or mixed by choosing more than one ethnic category. Thirteen of the fifteen indicated they were biracial, with two also checking the box for Asian-American, six checking Caucasian or White, two checking Indian-American (India/Indian subcontinent ancestry), one checking Latino/Hispanic/ Chicano, two checking native American or Alaskan Native, and one checking International student. The two remaining students indicated their ethnicity as being multi-racial. One checked their ethnic identity as being African American, Asian American, Caucasian, Native American and Polynesian/Pacific Islander. The other checked boxes indicating their ethnic identity as including African American, Caucasian, Indian-American and Native American. Based on the "One Drop Rule"[2], all students with African ancestry in their lineage are categorized as African or Black American. This provided justification for retaining the 16 students of mixed ancestry in this study.

[2] The "One-Drop Rule" stipulates that any person with one-drop of Black blood in their ancestry be categorized as Black or African American. This rule began as an economic rationalization during slavery as a means of increasing the slave numbers. It remains as a foundational basis

Recruitment

Participants were recruited to complete the MSUSAS in four ways: by mail, through student group membership, in class, and peer solicitation.

Mail. The MSUSAS was initially disseminated to all sophomore students residing in the immediate East Lansing area by campus mail or U.S. postal service, during the spring 2000 semester. Forty-seven of the returned mail responses were from African American students. Students responding by the deadline were eligible for entry in a prize drawing consisting of cash and gift certificates.

Student group membership. To shore up the responses from the African American students, various student organizations were approached during both the spring and fall 2000 semesters for disseminating the survey among its student members. Organizations included the Office of Minority Student Affairs (OMSA), the Black Student Alliance (BSA), and the Black Graduate Student Association (BGSA). OMSA provided an on-campus office location as a pickup and drop off point for the survey. Students attending the BSA meeting were provided a campus mail envelope for returning the completed survey. BGSA members serving in the capacity of Minority Aides in the residence halls, or teaching assistants in the classrooms took multiple surveys and campus mail return envelopes for dissemination to the African American students. This method produced approximately 80 of the responses. Incentives were provided in the form of prize drawings for cash and gift certificates.

---

for federal categorization of races in North America (Heisler, 2001; What is "The One-Drop Rule"?, 2000; Wright, 1994).

In addition, a separate study of the assets specific to the student athletes at MSU was conducted during the fall semester of the 2000-2001 academic year. Of the initial surveys completed and returned by student athletes during the fall 2000 semester, eight of the respondents were African American. Their responses were included in this sample. Incentives were provided in the form of prize drawings for cash and gift certificates.

In class. To shore up the responses from all ethnic minority students, various professors volunteered to provide the MSUSAS to their students as an optional class assignment. Those students returning the completed survey by the assigned time were eligible to receive extra credit points towards their final grades. Approximately 20 of total responses from all participating classes were African American.

Peer solicitation. One professor asked students in his classes to pass the survey along to their ethnic minority peers. For each completed survey returned by the students they were given an extra credit point towards their final grade. Approximately 25 of the returned surveys were from African American students.

Data Collection

Students were asked to return the completed surveys either directly to the Collegiate Employment Research Institute (CERI) offices via campus mail or United States postal service, or to the person or office from which the survey was received. The latter surveys were then forwarded to CERI for data entry. All completed surveys were entered and coded by work-study students employed by CERI and two of the students from the MSUSAS research team. A faculty

member of the survey research team supervised the students. The survey responses were compiled into four groups: sophomores, athletes, Greeks, and students of color, and assigned group code numbers for easy classification. Each group's responses were entered into a separate computer data file. For the purpose of this study, the data specific to the African American students were extracted from each group and merged to form one file. Statistical measures were run on this file to provide data for this study.

Instrument

The measurement tool used for this study was the Michigan State University Student Assets Survey (MSUSAS) (Keith, Villarruel, Gardner, Lumpkin, & Daenzer, 1999). A copy of the questionnaire is provided in Appendix A. This survey was designed to measure the assets of college aged students by a team of MSU researchers, graduate and undergraduate students, and community members, for the purpose of strengthening the university and community supports provided students to allay risk behavior involvement and encourage academic achievement. The design team included two professors from the department of Family and Child Ecology, the faculty director of the Collegiate Employment Research Institute (CERI), a city council member, three undergraduate students enrolled in psychology and family-community services, and myself as the project manager and graduate research assistant.

Type of survey. The MSUSAS is a 248-item questionnaire measuring the assets and risks behaviors of college students. The construct formatting of the survey is similar to the Search Institute's Profiles of Student Life: Attitude and

Behavior Questionnaire (ABQ) (Benson, 1990; Blyth, 1993), with the MSUSAS divided into three dimensions of internal assets, external assets, and risk indicators/ behaviors. The first sixty-five items (1-65) of the MSUSAS are listed under external assets. One hundred thirty-six items (66-201) are listed under internal assets. The remaining 47 items deal with risk attitudes and behaviors, stress factors and management, and suggestions for improving the college experience. There are also 26 personal demographic items. This study focused on student responses to the external and internal assets, items 1-201, and on their responses to personal demographic items.

The MSUSAS' 201 asset items are broken into the two dimensions of internal and external assets. These items are grouped into nine constructs that measure support, empowerment, boundaries and expectations, constructive time use, commitment to learning, positive values, social competencies, positive identity, and family and peer influences. The remaining 47 items of the MSUSAS measure factors pertinent to college age individuals in regards to risk factors and behaviors, stress factors and stress management.

Except for sixteen of the questions, all items measuring assets or risks were rated on a four-point or five-point Likert scale. Some had five-point ratings regarding frequency of occurrence (i.e. 1 = never, 2 = seldom, 3 = some of the time, 4 = frequently, and 5 = always). Others had a four-point rating of agreement or satisfaction (i.e. 1 = strongly dissatisfied, 2 = dissatisfied, 3 = satisfied, and 4 = very satisfied) with the fifth place indicating the item as not applicable. There were also Likert scale questions that measured importance

(i.e. not important to extremely important on a five-point scale); probability (i.e. definitely would not to definitely would on a five-point scale); and stress (i.e. no stress to most stressful on a five-point scale. A number of the questions asked for the indication of actual numerical accounts (i.e. no days to 25-30 days on a five-point scale). Twelve of the questions were categorical yes/no items. Two of the questionnaire items asked respondent to check all that apply, and the last item was an open-ended question requesting suggestions for improving the student experience.

The demographics section of the survey contained 26 items related to the student's identity characteristics (e.g. ethnicity, age, and gender), class standing, residence, family information (e.g. birth order and father's and mother's education), types of financial assistance, and reasons for attending MSU. Four of the demographic items allowed for multiple answers as they asked the respondent to check all that apply. One of these multiple items was the question regarding ethnicity. Of the 178 total responses from students who checked African American ethnicity, 16 also checked additional ethnic categories. Fourteen of the sixteen checked one additional ethnic category. The remaining two students checked four and five categories respectively. All respondents indicating at least one ethnic category as being African American were included in this study, based on the "One-Drop Rule".

Reliability Analysis

The MSUSAS asset items were grouped into two dimensions of assets, external and internal, which closely parallel the Search Institute's ABQ (Benson,

1990). Figures 5 and 6 list the dimensional categories and subscales for the ABQ. As the MSUSAS was adapted to include developmental aspects characteristic of college age students, there were changes made to this original list of assets components. For example, an additional category of family and peer influence was added to the external categories of positive experiences provided to students by their family, peers, community, school, and communities. This resulted in five external categories of support, empowerment, boundaries and expectations, constructive time use, and family and peer influence. The internal categories or positive characteristics of the students were divided into four categories of commitment to learning, positive values, social competencies, and positive values.

Each of these categories encompasses three to seven subscales. Support consisted of other adult relationships, caring community, and caring school climate. Empowerment involves young adults being valued by community, young adults being seen as resources, a feeling of safety, and service to others. The subscales of boundaries and expectations were school and community boundaries, high expectations, and positive peer influence. Constructive time use included religious community and activities, how time was used, and creative activities and programs. Family and peer influence consists of parent, family and peer support, family boundaries, and positive family communication. Commitment to learning involves achievement motivation, study habits, learning engagement, and bonding to school. Positive values consist of caring, equality and social justice, integrity, honesty, responsibility, and restraint.

Social competencies include planning and decision making, interpersonal competence, communication competence, cultural competence and identity, resistance skills, and peaceful conflict resolution. Positive identity embodies personal power, self-esteem, sense of purpose, and a positive view of the future.

Each of the subscales consisted of two or more MSUSAS items, except for the four subscales of caring, positive family communication, responsibility, and sense of purpose. These subscales were measured by a singular survey item. As these subscales and corresponding items were strongly equated to similar singular ABQ items and or distinctively reflective of a college age developmental characteristic, they were retained in the MSUSAS.

To examine the validity of the constructs measured by the MSUSAS instrument a reliability analysis was conducted on the MSUSAS scales using the responses from all students. Prior to calculations, necessary items were reverse coded in a positive direction. Table 2 lists the categories, number of items, and the internal consistency or reliability coefficient for each category. The Cronbach alpha or reliability score measures the extent to which items obtained in a scale relate to each other. Measurements of .70 or higher are standard determinants of acceptable scale reliability (Spector, 1992).

Insert Table 2 about here

Overall, Table 2, shows the MSUSAS scales to have strong internal consistency with Cronbach's alpha scores ranging from .9348 to .5611 and an

Table 2
MSUSAS Scale Reliabilities

Category	# of Items measured	Cronbach's alpha
Support	34	.7368
Empowerment	16	.8268
Boundaries and Expectations	21	.6692
Constructive Time Use	26	.5611
Family and Peer Influences	18	.7074
Commitment to Learning	44	.7571
Positive Values	16	.8594
Social Competencies	57	.9348
Positive Identity	19	.8712

alpha score mean of .7693. All scales except boundaries and expectations and constructed time use had acceptable reliability indicated by alphas higher than .70. The lower alphas may be due to the divergent subscales listed under these two categories. To improve the alphas, additional items were reverse coded if they registered negative correlations. It should be noted that in a few instances, reverse coding of items led to lower or negative alphas. While other steps were also considered for their potential to improve the alpha scores, including the removal of items that were indicated to increase the scale alpha if deleted and the addition of factors to increase the number of items loading on a scale, no items were deleted or added.

The purpose for examining the MSUSAS scales was to establish reliability for using the instrument to assess the assets of college students, and establish a basis for cultural adaptations. The alpha mean score of .7693 indicates that the instrument does have significant internal consistency and thus is appropriate for use in this study.

Procedure

The objectives of this exploratory investigation were to (a) determine the ecological influences of ethnicity, developmental stage and context on the development of assets for African American young adults; (b) develop a culturally sensitive framework to identify assets particular to African American young adults; and (c) identify the types and prevalence of those assets predictive of the academic success of African American college students. Of particular interest for this investigation is (a) the testing of a hypothetical model that incorporates

ethnicity (i.e. African American), and (b) to develop a framework that examines the impact of institutional structures on the matriculation of ethnic minority college students. In order to carry out the objectives of this research most effectively two statistical measures were used. A series of factor analyses were conducted on the African American students' responses to the MSUSAS, to a) determine statistical significance of ethnicity on responses to the MSUSAS; b) develop a culturally based framework of assets; and c) test the reliability of the resulting culturally based model. Using the results from factor analyses, a path analysis model was designed to test the hypotheses regarding the influences of assets on academic achievement.

The following sections will present the specific hypotheses and associated results. Prior to presenting the specific results, descriptive data from the exploratory factor analysis, which was conducted to explore whether factors between Black and White students were different, are presented.

Chapter 4

RESULTS

Overview

The purpose of this exploratory investigation was to identify the assets most characteristic of African American college students and most indicative of academic achievement for African American college students in a large predominantly White institution. Of particular interest for this investigation was: (a) the testing of a hypothetical model that incorporates ethnicity (i.e. African American), and (b) the development of a framework that examines the impact of institutional structures on the matriculation and academic achievement of African American college students. With these interests in mind, this investigation was guided by three research questions: 1) What are the assets or strengths particular to African American college students? 2) How are these assets related to Hill's (1999) strengths of Black families? 3) How are these assets related to the academic achievement of African American college students?

Data analysis for this study consisted of two parts: 1) the development and testing of an ethnically appropriate model and 2) the hypothesis testing of variables predicted to indicate academic achievement. The first section presents hypotheses and findings associated with identifying the assets of African American college students and correlating them to the five Black family strength (Hill, 1999) factors of faith, kinship bonds, role adaptability, academic orientation, and work ethic. The second section tests the resulting ethnically appropriate assets model to determine its relation to academic achievement.

Three statistical measures were used in the data analysis. Exploratory factor analysis was used to identify the assets of African American and White college students. Confirmatory factor analysis or reliability testing was used to correlate assets to the five strengths of Black families, with resulting scales being considered as a frame for an ethnically appropriate model. Various paths predicting the model's fit as a predictor of academic achievement were hypothesized and examined using structural equation modeling. Specific hypotheses and findings are presented in each section. Conclusions and implications based on the findings are presented in the discussion chapter to follow.

Preliminary Statistical Analyses

Prior to examining the research questions and associated hypotheses preliminary descriptive statistical analyses were conducted to describe the study sample and to show statistical validity for the MSUSAS instrument. Specifically, frequencies were calculated to determine the characteristics of the sample and reliability analyses were calculated on the nine[3] MSUSAS asset scale categories to determine internal consistency. Refer to Appendix B for a listing of the MSUSAS external and internal asset measurement items grouped by designated assets category.

The sample descriptives were detailed in Table 1, presented in the previous chapter. In review, there were 1415 total responses to the MSUSAS. Of

[3] Note: Search Institute (Benson, 1990) initially identified six asset categories, which were later expanded to eight categories (Benson, et al., 1998). A ninth category of family and peer support was added to the MSUSAS (Keith, et al., 1999) when the survey was adapted for use with young adults/college students.

this number 178 self-categorized as African/Black American, and 1049 self-categorized as Caucasian/White American. Based on the demographic question requesting students to indicate ethnicity by checking all that apply, all students who checked African American or Black were considered to be Black students, even if other ethnic categories were also indicated. This inclusion decision was based on the "one-drop rule", a foundational basis for federal categorization (Heisler, 2001; Wright, 1994). Only students indicating Caucasian or White American as their sole ethnicity are considered to be White.

As the MSUSAS was intended to assess the assets and risks of late adolescent or young adult college students ages 18-23, students not in that age range were excluded from the analyses. This resulted in five Black and 23 White students' responses being removed from this study. The resulting N was 173 for Black students and 1026 for White students.

Cronbach alphas or internal consistency reliability measures were calculated on the MSUSAS scales and are shown in Table 2, which was also discussed in detail in the previous chapter. Overall, the MSUSAS was shown to have internal consistency as alpha scores ranged from .9348 to .5611, and the alpha score mean was .7693. Measurements equal to or greater than .70 are standard determinants of acceptable scale reliability (Spector, 1992). Thus, the MSUSAS was deemed a reliable and valid database, providing a pool of responses and items for developing a culturally sensitive model for accessing the assets of African American college students. A copy of the MSUSAS is included in Appendix A.

The Development of an Ethnically Appropriate Model

Three progressive steps were taken to develop an ethically appropriate model. 1) Exploratory factor analyses were conducted on the external and internal assets of Black and White students to examine differences in responses based on ethnicity. 2) Thirty-nine asset subscales were developed based on the factor loadings specific to the Black students. 3) An ethnic model specific to African American college students was developed by grouping the items from the 39 asset subscales according to Hill's (1999) five strengths of Black families: faith, kinship bonds, role adaptability, academic orientation and work ethic.

What are the assets of African American college students?

Hypothesis 1: The assets or strengths of African American college students significantly differ from the assets of White students.

Step 1: Exploratory factor analysis. Using SPSS, exploratory factor analyses were conducted on the external and internal assets for both Black and White students for the purpose of examining significant differences based on ethnicity, and to provide statistical support for examining an alternative framework specific to African American college students. All factor analysis procedures used a principle components extraction method with varimax rotation. In order to assess the influence of ethnic cultural differences, two sets of exploratory factor analyses were run separately for the Black and for the White students. These two sets were then compared. It is important to note that this is not a comparative study. However, contrasting the factor analyses for the two groups provides statistical support for using culturally appropriate parameters to

examine the assets of African American students. The first set explored the external assets, or items related to the positive characteristics or experiences provided to the students by their university, family, peers, community, and faith based congregation. Specifically, these were MSUSAS items 1-65e, referred to in Appendix A. The second set explored the internal assets or positive characteristics provided by the individual. These were MSUSAS items 66-201, also referred to in Appendix A.

Tables 3 and 4 show the external assets of Black and White students, and Tables 5 and 6 show the internal assets of Black and White students. External assets are the positive experiences and characteristics provided to the developing individual by his/her environments of family, peers, school, congregation of faith and community. Examples of such experiences and characteristics include the provision of support, opportunities to contribute, and expectations to achieve. Such characteristics encourage and empower students to succeed. Internal assets are the positive characteristics attributed to the individual. These characteristics include positive values, positive identity, a commitment to learning, and social competencies. Internal characteristics are believed to develop in correlation to the provided external assets. Appendix B lists the MSUSAS items according to their asset categorization as measurements of support, empowerment, boundaries and expectations, family and peer support, commitment to learning, positive values, social competencies, and positive identity. In the tables, a lower case 'r' placed before an item number indicates that the item was reversed to read positively.

Insert Tables 3, 4, 5, and 6 about here

In each table, the factor component column indicates the asset loaded and its hierarchical position. For example, the external assets for Black students (Table 3) listed in order of priority and including alphas were as follows. 1) Community welcomes young adults is evidenced by students' concerns and opinions being heard and students feeling welcomed by the community of East Lansing (α = .9064). 2) Peer importance is evidenced by students indicating the the importance of helping friends and others, and the availability of peers as sources of advice, feedback, support and encouragement (α = .8741). 3) Peer risk involvement concerns students' reports that their friends smoke cigarettes, drink alcohol, use drugs, and have been in trouble with the law. Also loading on this factor was students' frequency of communicating with parents and drinking while underage (α = .7841). The frequency of communication with parents was found to significantly correlate at the .05 level of significance (.162) to friends' use of drugs and at the .01 level of significance (.205) to friends drinking alcohol. 4) Black students had two separate listings indicating caring school climate. This first one is related to students' reports of satisfaction with MSU resource centers (α = .7519). 5) Students' speaking with MSU and community personnel about important issues and concerns evidences students' relationships with MSU personnel (α = .6992). 6) Family and peers caring if students smoke cigarettes or drink alcohol implies the presence of familial and peer boundaries (α = .8272).

Table 3
Factor Analysis of External Assets for Black Students. N = 173

Factor Component		Items	% of Variance	Alpha
1	Community welcomes young adults	53h, 53g, 53e, 53a, 53b, 53f, 53c, 53d, 41	8.170	.9064
2	Peer importance	19, 20, 22, 21, 18, 15, 14, 37,36	7.263	.8741
3	Peer risk involvement	58, 57, 56, 60, 6, 54g, r34, 2	5.929	.7841
4	Caring school climate – related to resource centers	8g, 8e, 8d, 8k, r7i, 8i	4.068	.7519
5	Relationships with MSU personnel	7h, 7g, 7j, 7f, 7k, 7l, 54l	3.571	.6992
6	Family and peer boundaries	17, 13, 12, 16	3.232	.8272
7	Parental social support and advice	1d, 1c, 1b, 1e	2.973	.7654
8	Student activity participation – related to living on-campus	62, 7b, 7d, 7c,61, 54m	2.637	.7124
9	Safe and caring community	48, 49, 8m, 9	2.504	.6273
10	Young adults as resources	47, 46, 45	2.480	.6806
11	Expectations	32, 31, 25	2.350	.5581
12	MSU rules	27, 26, 8l	2.144	.5293
13	Peer resources	5, 4, 3	2.001	.6332
14	Caring school climate – related to psychological caring, support and school boundaries	r10, 11, r30	1.911	.4323
15	Religious importance	39, 7e, 38	1.886	.6529
16	Constructive time use – computer use and socializing	54d, 54i, 54e	1.809	.5647
17	Constructive time use - settings	65e, r65a, r8c	1.733	.4269
18	Constructive time use – athletics and games	54k, 54j, 54b	1.706	.3903
19	Balanced life	64, r35	1.623	.4461
20	Constructive time use- Empowerment	r65b, r65c, 44, 54h	1.501	.4452

Table 4
Factor Analysis of External Assets for White Students. N = 1026.

Factor Component		Items	% of Variance	Alpha
1	Community values young adults	53c, 53e, 53b, 53h, 53g, 53a, 53d, 53f	6.675	.9155
2	Other adult relationships	7l, 7h, 7g, 7j, 7i, 7d, 7m, 7k, 7f, 7e, 7c	6.285	.8532
3	Positive peer influence	19. 22, 20, 21, 18, 15, 14, 7n	4.731	.8565
4	Parental support	1c, 1d, 1e, 1b, 1a	4.071	.9435
5	Risk involvement of friends	58, 57, 56, 6, 60, 54g	3.873	.8406
6	Boundaries and expectations	32, 33, 31, 27, 26, 34, 37, 36	3.229	.7654
7	Caring school climate – resource centers	8e, 8g, 8d, 8k	2.359	.8270
8	Religious involvement	39, 38, 40	2.135	.6492
9	Constructive time use during Spring break	65c, 65d, 65b, 65e	1.961	.6338
10	Family and peer boundaries	12, 13, 17, 16	1.864	.6801
11	Caring community	41, 42, 43, 44	1.783	.6654
12	Young adults as resources	47, 46, 45	1.618	.7229
13	School boundaries	29, 28, 30, 35	1.519	.6353
14	Safety	49, 48	1.433	.7363
15	Caring school climate – housing, transportation, cafeteria	8b, 8l, 8j	1.409	.5247
16	Young adult activities	65a, 63	1.284	.5692
17	Parental expectations and family boundaries	23, 24, 25	1.200	.6577
18	Constructive time use - athletics	54l, 54b, 54k	1.187	.4592
19	Student activity participation – related to living off campus	62, 7b, r50	1.173	.4674
20	Peer support	5, 4	1.114	.6731

Table 5
Factor Analysis of Internal Assets for Black Students, N = 173.

Factor Component		Items	% of Variance	Alpha
1	Communication competence	157, 153, 154, 152, 155, 148, 162, 158, 149, 161, 167, 191, 169	11.435	.8472
2	Positive identity	195, 197, 143, 142, 189	4.723	.7671
3	Equality and social justice	117, 115, 116, 166, 118	4.114	.7971
4	Restraint behaviors and influence	98a, 98b, r130, 98c, 82, r185	3.459	.7257
5	Cultural identity	175, 172, 173	3.082	.6991
6	Interpersonal competence	159, r134, 160, r199, 179	2.817	.7413
7	Self-esteem	198, 196, 193, 177	2.523	.7088
8	Integrity	123, 125, 128, 133, 144	2.448	.7214
9	Adaptability skills	137, 186, 194, 146	2.411	.6145
10	Social skills	187, 188, 108, 163	2.373	.6673
11	Group orientation	132, 131, 97, 165	2.184	.4778
12	Commitment to learning	77, 78, 84, 168, 70	2.039	.5302
13	Learning engagement	91, 90	1.923	.8235
14	Friends' resistance skills	182, 183, 181, 184	1.779	.7448
15	Achievement orientation	105,104, 176, 102	1.759	.5918
16	Coping skills	140,141, 138, 139	1.693	.7224
17	Achievement motivation	100, 101, 86	1.658	.5111
18	Positive view of future	200, 201, 106, r129	1.599	.4208
19	Positive values	126, 122, 127, 124	1.561	.6650
20	Interpersonal interaction with faculty	93, 92, r114	1.499	.5518

Table 6
Factor Analysis of Internal Assets for White Students, N=1026.

Factor Component		Items	% of Variance	Alpha
1	Positive values, commitment to learning, and parental influence	115, 119, 122, 118, 117, 120, 116, 132, 113, 127, 106, 130, 124, 131, 108, 107, 121, 111, 126, 112, 114, 128, 129, 125, 109, 123, 134, 133, 110, 135	18.500	.9485
2	Positive identity and interpersonal competencies	193, 190, 191, 201, 194, 200, 196, 198, 187, 192, 188, 186, 180, 199, 177, 197, 185, 189, 179, 184, 178, 195, 176, 171	6.570	.9444
3	Social competence	138, 154, 157, 158, 149, 148, 137, 139, 155, 161, 152, 153, 140, 162, 150, 145, 159, 160, 141, 156, 169, 146, 164	4.995	.9284
4	Peaceful conflict resolution and planning and decision making	143, 144, 142, 136	3.646	.8140
5	Commitment to learning – resources and plans	74, 75, 73, 69, 66, 71, 68, 72	3.077	.8021
6	Commitment to learning – study habits	84, 87, 85, 83, 77, 96, 78	2.600	.7227
7	Learning engagement	91, 90, 92, 93	1.902	.7198
8	Restraint	98b, 98c, 98a	1.711	.7098
9	Commitment to learning – achievement motivation	100, 101, 99, 103, 102	1.593	.6813
10	Cultural competence	165, 166, 168, 167, 163	1.479	.8081
11	Cultural identity	175, 173, 172, 174, 170	1.378	.7687
12	Resistance skills	182, 181, 183	1.293	.8135
13	No items loaded	------	1.195	--

7) Parental social support and advice is given in regards to the areas of career, academics, social issues, and health (α = .7654). A fifth aspect of parental support regarding financial assistance did not load for Black students, although it did load for White students. This infers that Black students are not dependent on their parents for financial support while attending college, and financial assistance is received through other means. 8) Student activity participation was related to on-campus residence hall living for Black students. For White students, this factor was related to preference for off-campus residence. 9) Students perceived MSU as providing a caring environment, were satisfied with classrooms, and felt safe (α = .6273). 10) Young adults were perceived as resources when provided opportunities to make the school and community a better place (α = .6806). 11) Parental expectations that students' will continue to follow their rules, and self expectations of getting arrested if getting into trouble are related to adhering to residence rules (α = .5581). 12) The clear rules set by MSU and university housing establish school boundaries (α = .5293). 13) Peer resources are evidenced by the numbers of adults and close friends students have access to for support (α = .6332). 14) This second listing of caring school climate is related to the psychosocial caring evidenced in professors' behaviors, support and school boundaries (α = .4323). 15) Religious importance for Black students was equated with the importance of being spiritual or religious, frequency of speaking with faith-based leaders about important concerns, and regular attendance to religious activities (α = .6529). 16) The last five factors all deal with some aspect of constructive time use. The first is related to computer

use and socializing (α = .5647). 17) Constructive time use is related to settings of home with family and friends, and not at student vacation "hot spots" during spring break, or satisfaction with the computer labs (α = .4269). 18) Constructive time use is related to time spent observing or engaged in intramural sports, playing video games, and exercising (α = .3903). 19) Having a balanced life was inversely related to just going along with what friends tell students to do (α = .4461). 20) Studying and working during spring break were negatively related to students having clear roles and watching television in this last listing of constructive time use (α = .4452).

The external assets for White students (Table 4) in order of priority with factor reliability score (α) were as follows. 1) Community values young adults based on their concerns and opinions being heard (α = .9155). 2) Other adult relationships are implied by the number of MSU and East Lansing personnel sought out by students for discussing concerns and important issues (α = .8532). 3) Positive peer influence is evidenced by reports that students' friends are important sources of feedback, support and encouragement (α = .8565). 4) Parental support is provided to students in the academic, career, health and stress, social, and financial realms (α = .9435). 5) Risk involvement of friends concerns students' reports that their friends smoke cigarettes, drink alcohol, use drugs, and have been in trouble with the law (α = .8406). 6) Boundaries and expectations are based on the school rules, and influences regarding students' adherence to them (α = .7654). 7) As with the Black students, there were two separate listings of caring school climate for the White students. This first one is

related to students' satisfaction with MSU resource centers (α = .8270). 8) Religious involvement includes the importance of being religious, attendance to religious activities, and feeling pressured to attend services different from own faith (α = .6492). 9) There were two separate listings for constructive time use. This first is related to spring break activities of study, service to others, work, and time spent at home with family and friends (α = .6338). 10) Family and peers caring if students smoke cigarettes or drink alcohol implies the presence of boundaries (α = .6801). 11) Students' reports of having a caring relationship with East Lansing indicate a caring community (α = .6654). 12) Young adults are viewed as resources when they are given opportunities to make the community better (α = .7229). 13) School boundaries are set by MSU rules (α = .6353). 14) Students report feelings of safety on campus and in the community (α = .7363). 15) This second caring school climate listing is related to students' satisfaction with MSU housing, transportation and cafeterias (α = .5247). 16) Participation in young adult activities are reported by students' vacationing in "hot spots" during spring break and participating in Greek social life while on campus (α = .5692). 17) Students report parental expectations that they will continue to value family boundaries and rules while in college (α = .6577). 18) This second constructive time use grouping is related to the amount of time spent engaged in or watching intramural sports and university athletics, and exercising (α = .4592). 19) Students report on participation in residence hall activities, frequency of speaking with residence advisor, and preference for living off-campus in East Lansing (α =

.4674). 20) The number of close friends students have attending MSU assumes a level of peer support (α = .6731).

Only two external assets factors loaded identically for Black and White students, family and peer boundaries and young adults as resources. Items also loaded identically on the latter factor for the two groups of students. Based on the hierarchy of loading and percentage of variance Black students gave more credence to the importance of both factors, as family and peer boundaries loaded sixth with a variance of 3.2%, and young adults as resources loaded tenth with a variance of 2.5%. Comparatively, for White students family and peer boundaries loaded tenth with a variance of 1.9% and young adults as resources loaded twelfth with a variance of 1.6%.

Overall, the factor loadings for White students were more consistent with the Search Institute's (1996) asset categories, whereas the loadings for Blacks were more inclusive of varying aspects of assets and strengths. Being more exclusive to the assets categories, factors loading for White students contained only those items directly related to the initial item. For example, for White students, community values young adults is exclusive to items measuring students' feelings regarding their concerns being heard and addressed. Other adult relationships are exclusive to measuring the frequency of students' talking with MSU and East Lansing personnel about issues and concerns. Safety is exclusive to feeling safe on campus and in East Lansing after dark. For Black students, community welcomes young adults included the aspect of young adults being valued by the community as part of being made to feel welcomed and

accepted. Relationships with MSU personnel identified school faculty and staff and community members students spoke with about concerns and issues as well as time spent engaged in and watching university athletics. It has been suggested that this latter item alludes to a relationship with coaching personnel or other athletic related mentors. Also for Black students, the safety factor included satisfaction with classrooms and the school providing a caring environment.

In addition, White students gave prominence to relationships with non-related school-based adult and parental supports. This is evidenced in the hierarchy of the factor loadings and the amount of variance accounted for in the top loadings. White students also emphasized physical structures and settings as determinants of caring school climate, while Black students emphasized the psychosocial relationships with professors and students' own behavior as determinants of a caring school climate. In addition, Black students gave more prominence overall to aspects related to peers rather than to relationships with adults.

Tables 5 and 6 list the factor components of internal assets for Black and White students respectively. The listing of internal assets for Black students (Table 5) listed in order of loading are as follows. 1) Communication competence is evidenced by students' reports of interpreting nonverbal communication, getting their point across, being a good listener, considering all sides and choosing words carefully before speaking (α = .8472). 2) Positive identity was evidenced by the conceptual reversal of items related to feelings of unhappiness

and loneliness, having temper tantrums, feeling like injuring someone, and avoiding angry people. The resulting alpha was .7671. 3) Equality and social justice was indicated by students' respect for personal rights, support of equal rights, and consideration of others' feelings (α = .7971). 4) Restraint behaviors and influences were measured by students' frequency of participation in illegal, dangerous or hurtful activities. These three activities and attending class drunk or high were inversely related to mother's consistent presence and influence and students' avoidance of riotous crowds (α = .7257). 5) Cultural identity was measured by the ability to explain one's cultural background, having ties to cultural roots, and comfort in discussing culture with others (α = .6991). 6) Interpersonal competence was related to making friends easily, fitting in with others, feeling comfortable initiating conversations with strangers, and being popular among other students. Two items loading negatively on this factor (134 and 199) both measured level of agreement for the same statement: "I have trouble fitting in with others". After dropping item 199 and reversing item 134 the resulting alpha was .6994). 7) Self-esteem, personal power and resistance skill were measured by students' satisfaction with self, confidence in self, and ability to say 'no' to friends (α = .7088). 8) Integrity was measured by students' likelihood of lying, cheating and getting into arguments (α = .7214). 9) Adaptability skills were equated with students learning from mistakes, peaceful conflict resolution, making self-critical evaluation in order to better selves, and personal power (α = .6145). 10) Social skills were identified as calmly talking and listening to others' points of view even when angry, hanging out with people

of different cultures, and liking college for its social aspects (α = .6673). 11) Students enjoying being with others, feeling like part of a group of friends, and learning best within a group setting indicated group orientation. Also loading negatively on this factor was the enjoyment of being with people of other ethnicities (item 165). Reverse coding of this item resulted in an alpha less than .20. Inputting all items as positive resulted in an alpha of .4778. 12) Commitment to learning is indicated by class attendance, preparation for classes, and learning from other cultures (α = .5302). 13) Learning engagement is indicated by students leading class discussions and speaking up and out in class (α = .8235). 14) Resistance skills are indicated by friends behaviors of not drinking and driving, doing anything illegal, never purposely hurting others, or letting student do either (α = .7448). 15) Achievement orientation was indicated by students' membership in professional organizations, knowledge of degree needs for gainful employment in field of study, plans to continue schooling, and avoidance of people who might hinder student (α = .5918). 16) Coping skills were equated with keeping a cool head in emergencies, seeing the humor in life, and feeling capable of coping and bouncing back from mishaps (α = .7224). 17) Achievement motivation was related to awareness of educational needs, being provided challenging and supportive courses, and working well with others (α = .5111). 18) Positive view of the future was equated with being optimistic about future, believing life has purpose, and enjoying college overall. Negatively loading on this factor, indicating an inverse relationship was the consistent and influential presence of father in the student's life. When father's presence was

examined as a positive factor, the resulting alpha was .1508. When father's presence was reverse coded the resulting alpha for the four factors was .4208. Mother's presence was an influence on student's restraint behaviors and loaded with factor 4. 19) Positive values was measured by students telling the truth, making decisions based on beliefs, accepting responsibility for actions, and standing up for beliefs (α = .6650). 20) Interpersonal interactions with faculty was measured by students sending email to faculty and visiting faculty during office hours (α = .6972). Also negatively loading on this factor was item 114 "if I received a low grade my parents would be upset". When reverse coded and retained in the scale the alpha drops to .5518.

The internal assets of White students (Table 6) in order of priority are as follows. 1) Thirty items loaded on the first factor, including 12 items related to positive values (items 115,119, 122, 117, 116, 127, 124,121, 126, 128, 125,and 123); nine items related to commitment to learning (items 113, 106, 108,107, 111, 112, 114, 109,and 110); six items of social competencies (items 118, 120, 132,134, 133, and 135); and three items related to positive identity and specific to predicting self-esteem (items 130, 131,and 129). The alpha (α) for this scale was .9485. 2) The second factor loading was also a listing of multiple items, with 11 items measuring positive identity and 13 items measuring interpersonal competencies. Positive identity included items of self-esteem (193, 194, 198, 192), positive view of the future (201), sense of purpose (200), and personal power (190, 191, 196, 197, 195). Interpersonal competence included items of peaceful conflict resolution (187, 188, 186, 189), resistance skills (185, 184, 177,

178,176), interpersonal competence (180, 199, 179) and cultural identity (171). Alpha = .9444. 3) Twenty-three items loaded on the third factor of social competence. Items 173, 148, 157, 158, and 162 measured planning and decision-making. Items 152, 159, 160, and 154 measured interpersonal competence. Items 149,155, 156,and 161 measured communication competence. Items 150, 153, 164, 169 measured cultural competence. A single item, 140, measured peaceful conflict resolution. Items 145, 146, and 138 measured personal power, and items 139 and 141 indicated a positive view of the future. Alpha = .9284. 4) Peaceful conflict resolution and planning and decision making skills were measured by students' reports of temper outburst, arguments, and stopping to think before acting (α = .8140). 5) Commitment to learning loaded on three factors. In the first emphasis is placed on having access to and using a computer for email, summer employment related to major, plans to study abroad, involvement with university government, and grades (α = .8021). 6) In the second factor of commitment to learning items are related to study habits, and attending and preparing for classes (α = .7227). 7) Learning engagement involves participating in class and interacting with faculty (α = .7198). 8) Restraint is measured by the frequency of which students participate in activities considered to be illegal, dangerous, and/or hurtful (α = .7098). 9) The third factor of commitment to learning measures students' motives to achieve (α = .6813). 10) Cultural competence is indicated by students hanging out with, communicating with, and learning about people of different ethnicities and cultures (α = .8081). 11) Cultural identity includes having the

ability and comfort to explain one's cultural roots and ties (α = .7687). 12) Resistance skills are indicated by friends behaviors of not drinking and driving, doing anything illegal, or letting student do either (α = .8135). 13) No items loaded on this component despite it accounting for 1.195% of the variance.

Black students had a minimum of 20 distinct internal assets factors in comparison to 12 factors providing evaluative items for White students. In addition, assets for Blacks were more diversely seriated than the assets for Whites. For example, 29% of the variance for White students' internal assets were classified within three formal asset categories of positive values, positive identity, and social competence. In comparison, the same amount of variance for Black students' internal assets were classified within six factors of communication competence, positive identity, equality and social justice, restraint, cultural identity, and interpersonal competence. In addition, Black students' individual assets were integrative of factors which included the varying assets categories, whereas White students' assets were more exclusive to particular categories as defined in the classification listing of MSUSAS items, which are included in Appendix B. For example, the factor of restraint for White students was specific to three items related to low frequency of participating in activities considered to be illegal, dangerous or hurtful. For Black students, the factor of restraint included these illegal activities, class attendance behaviors (attending class in a drunken or "high" state), avoidance of riotous crowds, and mother's presence as an influence.

Overall, Black students (Table 5) place emphasis on the social competencies of communication, peaceful conflict resolution, interpersonal skills, and cultural competence, whereas White students (Table 6) place emphasis on the academic characteristics of commitment to learning. This is determined by the order of loading and number of factors loaded on each table specific to those themes. The order of loadings indicates the importance and weight of the concept in comparison to the other concepts.

It is also important to note in the comparisons of the assets loadings for Black and White students the number and order of items loading for each factor. The order of the items loading for each factor also indicates the importance and weight of the item in comparison to the other items. For example, the factor of community values young adults loaded first on external assets for both Black and White students. Noted are the order of items listed and a slight difference in the number of items. For White students, only those items pertaining to community members hearing and addressing students' concerns are listed. Also, professional staff (53c) and East Lansing community (53e) are considered most likely to hear opinions and speak to concerns. In addition to feeling that community members heard and addressed their concerns Black students also perceived that East Lansing residents made them feel a welcomed part of the community. Black students also prioritized East Lansing police and officials (53h) and MSU police (53g) as most likely to hear opinions and speak to concerns.

Also considered was the percent of variance explained by the factor, and the significance of the alpha score. The percentage of variance or eigenvalue represents the proportion of the factor in regards to the other components (Spector, 1992). In other words, the first factor accounts for as much of the proportion or variance possible. The second factor accounts for as much of the residual variance or weight possible, and so on. Variances greater than one (>1.0) have strong intercorrelation, whereas items equal or less than one have poor or no correlation with other items (Spector, 1992). The number of factors loading with variances greater than 1.0 is indicative of multidimensionality of concepts.

Table 3 (Black students' external assets) had 37 components extracted and 32 factors with eigenvalues greater than 1.0, in comparison to table 4's (White students' external assets) 32 extracted components and 23 factors with eigenvalues greater than 1.0. Table 5 (Black students' internal assets) had 43 components extracted and 32 factors with eigenvalues greater than 1.0, whereas table 6 (White students' internal assets) only had 26 components load and 16 factors with eigenvalues greater than 1.0. Based on the number of extractions and the proportional variance of factors represented by the eigenvalues, the two tables for the Black students (tables 3 and 5) indicate a larger variance of components unaccounted for in the tables and suggests a greater depth of dimensionality.

The alpha column indicates the internal consistency reliability score showing the significance of the scale measured. Reliabilities equal to or greater

than .70 are considered to be statistically significant. When indicated that reversing an item would improve the alpha and reversing the item was conceptually appropriate negative loading items were reverse coded to indicate inverse relationships and improve the alpha score to a statistically acceptable level. As the exploratory factor analyses were intended to provide descriptive data regarding the influence of ethnicity on factor loadings, no items were deleted, even when indicated that the deletion of specific items would improve the alpha score. Factors were also retained based on their distinctive theoretical relevance to the research regarding African American college students and/or assets. Therefore included in the tables are a few scores with reliabilities much lower than the significant .70.

Results. The exploratory factor analyses were run for two reasons: 1) to explore whether factors between Black and White students were different and establish statistical relevance for examining the assets most characteristic of Black students, and 2) to delineate the asset characteristics of Black college students for the purpose of developing an ethnically appropriate assets model and testing hypotheses relating assets to academic achievement. Findings showed great similarities in the external assets provided to both groups of students, but major differences in the internal assets. Seven of the top ten external assets were quite similar for both groups, indicating the importance of community, parents, peers, and school as providers of positive experiences for all college students regardless of ethnicity. However, differences in how some of these experiences were perceived (e.g. caring school climate being inferred from

physical resources and psychosocial behaviors of faculty) and in the internal assets were based on ethnic groups. Therefore ethnic culture must be considered for its influence on what assets are provided to students, how they are likely to be perceived by students, and how they are identified as personal characteristics of students.

Overall, the factor analyses findings showed statistically significant differences in the number of external and internal asset factors loading for each group, the order in which factors loaded, and the number of and order of items loading for each factor. It was hypothesized that the assets or strengths of African American college students were significantly different from the assets of White students. Thus the null hypothesis of hypothesis 1 is rejected and statistical relevance is established for examining the assets specific to Black college students.

Step2: Determining the assets of African American college students. Thirty-nine factor scales of assets were extracted by using the factor loadings of the exploratory factor analyses specific to African American college students. Eighteen external assets were drawn from the factors in Table 3. These are the positive experiences and characteristics provided to students by their peers, family, school, community, and faith community. The remaining 21 assets were drawn from factors in Table 5, and are considered internal assets. These are the positive values, competencies, attitudes, and ideals characteristic of the student.

External assets. Table 7 provides a listing of the 18 external asset factors of African American college students. Included in the table are the items that

loaded on each factor with their associated scale alphas. Also listed are any items that were removed from or added to the initial factor loadings. Deleting or adding factors was usually done to improve the defining factor and/or the factor alpha. An overview of the assets is provided in the text that follows. Internal assets are shown in table 8 and discussed in the section that follows.

Insert Table about 7 here

The external assets were based on the factor loadings presented in the previous section. Few changes were made to this original listing. The four constructive time use factors were combined to form two separate factors of constructive time use and creative activities- spring break. One item (43) was added to the factor of caring school climate as it was judged to measure dimensions of a psychological caring school climate, slightly improving the alpha to .4607. Only one item (8L) was deleted from school boundaries, thus improving the alpha to .6402. Eight items with reliabilities of .4461 - .6529 were retained as they address important theoretical aspects of assets related to African American college students. For example, expectations (α = .5581), school boundaries (α = .6402), peer support (α = .6332), religious involvement (α = .6529), constructive time use (α = .5150), and creative activities (α = .5692) are all Search Institute asset categories (Leffert et al., 1998). However, the defining concepts loading on these factors are influenced by culture. The factors caring

Table 7
External Assets of African American college students -- Items and scale alphas.

Factor 1: Community welcomes young adults. Alpha = .9064 (9 items)

53H. I feel my concerns and opinions are heard and addressed by East Lansing Police and officials.
53G. I feel my concerns and opinions are heard and addressed by MSU Police.
53E. I feel my concerns and opinions are heard and addressed by East Lansing community.
53A. I feel my concerns and opinions are heard and addressed by MSU faculty.
53B. I feel my concerns and opinions are heard and addressed by MSU administration.
53F. I feel my concerns and opinions are heard and addressed by my community of permanent residence.
53C. I feel my concerns and opinions are heard and addressed by MSU professional staff.
53D. I feel my concerns and opinions are heard and addressed by MSU support staff.
41. East Lansing residents make me feel a welcome part of the community.

Factor 2: Peer importance. Alpha = .8741 (9 items)

19. I feel my friends listen to me
20. My friends and I are supportive of each other during difficult times.
22. My friends care about me.
21. My friends encourage me to do and be my best in everything I do.
18. My friends are a very important part of my life
15. I can go to my friends for advice.
14. I relate well to my peers.
37. Helping other people is important to me
36. Helping other people is important to my friends.

Factor 3: Peer risk involvement. Alpha = .7841 (8 items)

58. My friends smoke marijuana.
57. My friends do/use illicit drugs.
56. My friends smoke cigarettes.
60. My friends drink alcohol.
6. How many of your friends have been in trouble with the law?
54G. How many hours per week do you normally spend Partying (drinking)?
r34. While underage, my friends and I do not or did not drink alcohol.
2. How frequently do you communicate via phone, mail and/or in person with your parents while at school?

Factor 4: Caring physical school climate Alpha = .7519 (6 items)

8G. How satisfied have you been with the Learning Resource Center?
8E. How satisfied have you been with the Human Resource Center?
8D. How satisfied have you been with the Counseling Center?
8K. How satisfied have you been with the Writing Center?
r7I. How often do you speak with the Learning Resource Center about important issues, concerns or your future?
8I. How satisfied have you been with the Olin Health Center?

Factor 5: Relationships with MSU personnel Alpha = .6992 (7 items)

7H. How often do you speak with MSU support staff Center about important issues, concerns or your future?
7G. How often do you speak with the graduate assistant about important issues, concerns or your future?
7J. How often do you speak with the landlord about important issues, concerns or your future?
7F. How often do you speak with the department faculty about important issues, concerns or your future?
7K. How often do you speak with the boss/supervisor about important issues, concerns or your future?
7L. How often do you speak with MSU Police about important issues, concerns or your future?
54L. How many hours per week do you normally spend engaged in or watching university athletics?

Factor 6: Family and peer boundaries Alpha = .8272 (4 items)

17. My friends don't care if I smoke cigarettes.
13. My family doesn't care if I drink.
12. My family doesn't care if I smoke.
16. My friends don't care if I drink alcohol.

Factor 7: Parental social support and advice Alpha = .7654 (4 items)

1D. Which type(s) of support do you receive from your parents? Career advise
1C. Which type(s) of support do you receive from your parents? Academic advice
1B. Which type(s) of support do you receive from your parents? Social advice
1E. Which type(s) of support do you receive from your parents? Health stress issues

Factor 8: Student activity participation Alpha = .7124 (6 items)

62. I participate in dorm/residence hall sponsored activities.
7B. How often do you speak with the Resident Advisor about important issues, concerns or your future?
7D. How often do you speak with Adult neighbors about important issues, concerns or your future?
7C. How often do you speak with Community Members about important issues, concerns or your future?
61. I regularly participate in structured extracurricular activities, e.g. music, dance or art
54M. How many hours per week do you normally spend participating in events sponsored by university organizations or clubs?

Factor 9: Safe and caring community Alpha = .6273 (4 items)

48. As a whole, I feel safe while on campus
49. I feel safe walking in the East Lansing community after dark
8M. How satisfied have you been with the following MSU classrooms?
9. Overall, MSU provides a caring and encouraging environment.

Factor 10: Young adults as resources Alpha = .6806 (3 items)

47. I am given lots of opportunities to make the MSU community a better place
46. I am given lots of opportunities to make the East Lansing community a better place
45. I care about the community of East Lansing

Factor 11: Expectations Alpha = .5581 (3 items)

32. I stay away from trouble because I don't want to get arrested.
31. I adhere to the rules set by my residence hall or other place of residence
25. My parents trust me to follow their values even while I am away at college.

Factor 12: MSU rules Alpha = .6402 (2 items)

27. MSU sets clear rules about what I can and cannot do.
26. I understand what is expected of me, as a student, by MSU.

Item deleted from factor:
8L. How satisfied have you been with the following MSU University Housing?

Factor 13: Peer resources Alpha = .6332 (3 items)

5. How many of your close friends attend MSU with you?
4. How many close friends do you have?
3. Other than your parents, how many adults do you access for advice and support?

Factor 14: Caring psychosocial school climate Alpha = .4607 (4 items)

r10. I have felt put down or been embarrassed by my professors at MSU.
11. I can go to adult family members for help and support when I need it.
r30. I worry that I will get into trouble due to my behavior here on campus.
*43 I feel my needs are met by the social systems in my community of residence as a student.
* = Item added to scale

Factor 15: Religious importance Alpha = .6529 (3 items)

39. I regularly attend religious activities
7E. How often do you speak with Faith based leaders about important issues, concerns or your future?
38. Being spiritual or religious is important to me

Factor 16: Constructive time use Alpha = .5158 (6 items)

54D. How many hours per week do you normally spend retrieving, reading and answering email?
54I. How many hours per week do you normally spend surfing the internet?
54E. How many hours per week do you normally spend socializing with friends?
54K. How many hours per week do you normally spend engaged in or watching intramural sports?
54J. How many hours per week do you normally spend playing video games?
54B. How many hours per week do you normally spend exercising?

Factor 17: Creative activities – spring break Alpha = .5692 (3 items)

65B. On Spring Breaks, how often do you work?
65C. On Spring Breaks, how often do you study and do coursework?
65D. On Spring Breaks, how often do [provide] service to the community?

Factor 18: Balanced life Alpha = .4461 (2 items)

64. I effectively balance school, work, family, friends, and fun
r35. I usually just go along with what my friends tell me to do.

psychological school climate (α = .4607) and balanced life (α = .4461) were retained as they were factors unique to the sample population.

Overall, the external assets of African American college students include five factors measuring aspects of support (caring physical school climate, caring psychosocial school climate, other adult relationships evidenced by relationships with MSU adults, parental social support and advice, and peer resources for support); three factors measuring aspects of empowerment (community welcomes and values young adults, safe and caring community, and young adults as resources); five factors measuring aspects of boundaries and expectations (peer importance and influence, peer risk involvement, family and peer boundaries, expectations, and school boundaries in the form of MSU rules); and five factors measuring aspects of constructive time use (student activity participation, religious importance, constructive time use, creative activities, and balanced life).

Internal assets. Table 8 provides a listing of the 21 internal asset factors of African American college students. Included in the table are the items loading on each factor and associated scale alphas. Also listed are any items that were removed from or added to the initial factor loadings. Items were deleted if factor reliability findings indicated that removing the item would improve the alpha to acceptable levels and if removal of the item did not change the construct meaning. Items were added if they were conceptually compatible with the defining factor and they either improved upon or retained the integrity of the alpha score. An overview of the assets is provided in the text that follows.

Insert Table 8 about here

The internal assets were based on the factor loadings presented in the previous section regarding the exploratory factor analysis findings. All factors were retained. However, seven items were deleted and two items were added to factors to refine the defining characteristics and improve the alpha score. Item 199 was deleted from interpersonal competence increasing the alpha to .6994. Items 168 and 70 were deleted from commitment to learning to improve the alpha to .5865. Item 86 was deleted from achievement motivation and the alpha improved to .6188. Item 86 was then added to group orientation and item 165 was deleted from group orientation, increasing the alpha to .6149. Items 168 and 165 were combined to create factor 30, cultural competence. This factor had an alpha score of .6634. Item 129 was deleted from positive view of the future and its alpha improved to .5993. Item 114 was deleted from interpersonal with faculty increasing the alpha to .6972.

Eight items with reliabilities of .5865 - .6634 were retained as they address important theoretical aspects of assets related to African American college students. For example, social competence/skills (α = .6673), commitment to learning (α = .5865), achievement motivation (α = .6188), positive view of the future (α = .5993), positive values (α = .6650), and cultural competence (α = .6634), are all Search institute asset categories (Leffert et al., 1998). The defining concepts loading on these factors are pertinent to this study for they are

Table 8
Internal Assets of African American college students -- Items and scale alphas.

Factor 19: Communication competence Alpha = .8472 (13 items)

157 I consider all sides of the situation before making decisions
153 I am good at interpreting non-verbal communication
154 I listen to others and ask them questions about what they've said
152 I talk over problems with a friend
155 I clearly present my ideas to groups of people
148 I choose my words carefully before I speak.
162 I am good at planning ahead
158 I consider possible consequences before choosing to act
149 I get my point across when I talk with people.
161 I have been called a good listener
167 I can adapt to other cultures when I need to.
191 I can explain how I am feeling (e.g. angry, happy, worried, depressed)
169 I feel comfortable explaining my religious or spiritual beliefs to others

Factor 20: Positive identity Alpha = .7671 (5 items)

195 I often feel unhappy, sad or depressed
197 I often feel lonely
143 I have temper outbursts I can't control
142 I often feel like beating or injuring someone
189 When someone is angry with me, I will avoid him/her at all costs.

Factor 21: Equality and social justice Alpha = .7971 (5 items)

117 I respect other people's ways of looking at things, their lifestyles, and their attitudes
115 I respect other people's personal and civil rights
116 It is important that I support equal rights and opportunities for all people
166 I know how to talk to people from other races without insulting them.
118 I consider other people's feelings when making decisions

Factor 22: Restraint behaviors and influence Alpha = .7257 (6 items)

98A How frequently do you participate in activities that are considered illegal?
98B How frequently do you participate in activities that are considered dangerous?
r130 Overall, my mother was a constant and influential presence in my life.
98C How frequently do you participate in activities that are considered hurtful?
82 I come to class drunk or high
r185 I avoid riotous crowds and behaviors

Factor 23: Cultural identity Alpha = .6991 (3 items)

175 I can explain my own cultural background
172 I have strong ties to my cultural roots.
173 I feel comfortable talking to others about my culture.

Factor 24: Interpersonal competence Alpha = .6994 (4 items)

159 I make friends easily
r134 I have trouble fitting in with others
160 I am comfortable initiating conversations with strangers
179 I believe I am popular among other students

Item removed
r199 I have trouble fitting in with others

Factor 25: Self-esteem Alpha = .7088 (4 items)

198 I often feel satisfied with myself the way I am
196 I often feel sure of who I am (what kind of person I am)
193 I can name three or more good things about myself
177 I have no problem saying *"no"* to my friends

Factor 26: Integrity Alpha = .7214 (5 items)

123 To get ahead, sometimes you have to lie, steal or cheat.
125 Sometimes I bend the truth so I can get my way.
128 I am likely to cheat in class to get a better grade.
133 I avoid getting involved with others
144 I frequently get into arguments

Factor 27: Adaptability skills Alpha = .6145 (4 items)

137 I am good at learning from my mistakes
186 I would rather discuss a problem with someone instead of hitting or avoiding them.
194 I can name three things at which I'd like to be better
146 I can turn down a sexual advance if I'm not interested

Factor 28: Social skills Alpha = .6673 (4 items)

187 When I am in an argument, I try to listen to the other person's point of view.
188 If someone is mad at me, I will go to him/her and ask about it in a calm manner.
108 I like college for the social atmosphere
163 I hang out with people from different racial/ethnic backgrounds.

Factor 29: Group orientation Alpha = .6149 (4 items)

132 I enjoy being with other people
131 I feel part of a group of friends
97 I learn best with study groups
**86 I work well with others

Item removed
*165 I enjoy being with people who are of a different ethnicity than I am.
** Items added

Factor 30: Cultural competence Alpha = .6634 (2 items)

**168 I try to learn about other cultures.
**165 I enjoy being with people who are of a different ethnicity than I am.
** Items added

Factor 31: Commitment to learning Alpha = .5865 (3 items)

77 I attend all class sessions
78 I complete all class readings before class sessions
84 I adequately prepare for exams and presentations

Item removed
*168 I try to learn about other cultures.
*70 I would accept a poor grade before dropping a class

Factor 32: Learning engagement Alpha = .8235 (2 items)

91 I lead class discussions
90 I speak up/out in class

Factor 33: Resistance skills Alpha = .7448 (4 items)

182 My best friends never drink and drive
183 My best friends never let me drive drunk
181 My best friends never ask me to do anything illegal
184 My friends would never physically hurt someone on purpose.

Factor 34: Achievement orientation Alpha = .5918 (4 items)

105 It is important for me to have student membership in at least one professional organization
104 I will need a post baccalaureate degree or specialization certificate to qualify for gainful employment in my field of study
176 I stay away from people who might get me in trouble
102 I plan to continue my schooling after I receive my Bachelor's degree

Factor 35: Coping skills Alpha = .7224 (4 items)

140 I can keep a cool head in emergencies
141 I see the humor in life even when things are not going well
138 I feel capable of coping with most of my problems
139 I feel I can bounce back quickly from bad experiences

Factor 36: Achievement motivation Alpha = .6188 (2 items)

100 I am aware of the education or training needed for my career options
101 I am provided with challenging and supportive courses

Item removed
86 I work well with others

Factor 37: Positive view of the future Alpha = .5993 (3 items)

200 My life has purpose
201 I am optimistic about my future
106 Overall I enjoy college

Item removed
*r129 Overall, my father was a constant and influential presence in my life.

Factor 38: Positive values Alpha = .6650 (4 items)

126 I tell the truth even when it is not easy.
122 I make decisions based on what I believe
127 I accept responsibilities for my actions even when I make a mistake.
124 I stand up for what I believe even when it is unpopular to do so.

Factor 39: Engagement with faculty Alpha = .6972 (2 items)

93 I send email to faculty
92 I visit faculty during office hours

Item removed
*r114 If I received a low grade my parents would be upset.

influenced by culture. The factors adaptability skills (α = .6145), group orientation (α = .6198), achievement orientation (α = .5918), and interpersonal with faculty (α = .6972), were retained as they were factors unique to the sample population.

Overall, the internal assets of African American college students include eight factors measuring aspects of social competencies (communication competence, interpersonal competence, adaptability skills, social competence/skills, group orientation, resistance skills, coping skills, and interpersonal with faculty). Four factors measured aspects of having a positive identity (positive identity, cultural identity, self-esteem, and positive view of the future. Four factors measured the aspects of positive values (equality and social justice, restraint behaviors and influences, integrity, and positive values. Four factor factors were related to a learning commitment (commitment to learning, learning engagement, achievement orientation, and achievement motivation).

In summary, 39 assets were identified as characteristic of African American college students. Eighteen factors were classified as external assets, positive experiences and characteristics provided to the college students by their school, community of residence, peers, and family. Twenty factors were classified as internal assets, characteristics, values, and skills belonging to the students. The relatedness of these assets to the identified strengths of Black families are further examined in the next section.

How are the assets of African American college students related to the theoretical strengths of Black families?

Hypothesis 2: The assets of African American college students significantly relate to the five strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic.

Step 3: Developing a strengths-based framework of assets. This section explains the final step taken to develop an ethnically appropriate model based on a strengths based framework of assets. In the previous section 39 asset subscales were created using the findings from the exploratory factor analysis of the external and internal assets of Black students. This section examines how these assets were used to operationalize the five strength categories of faith, kinship bonds, academic orientation, work ethic and role adaptability based on the theoretical model which was depicted in Figure 8. Five scales of ethnically appropriate assets were created. Confirmatory factor analyses were run on each of the scales to determine reliability. These scales were then designated as the independent variables of the structural equation model shown in Figure 2, and tested in a following section of this study.

Scale Formation. Five primary scales were derived from Hill's (1999) model of Black family strengths. They are faith, kinship bonds, role adaptability, academic orientation, and work ethic. Conceptually, faith is defined as belief in a higher spiritual power, religious attitude, commitment to those beliefs (Hill, 1999), and religious activities (Scales & Leffert, 1999). Hill also notes that faith is evidenced by a positive outlook on life, coping skills which support perseverance and endurance, and meaning for life. Kinship bonds are the secure relationship ties one has with family, extended family, peers and other significant non-related

adults. It is a social support system or network of people related by blood or common circumstances. Role adaptability is the capacity to be flexible and adaptive to various role assignments, which are based on developmental stage of life span, environmental conditions, and assumed survival needs. Successful role adaptation is modeled by adults, and promotes an enhanced sense of self worth and self-esteem. Academic orientation is defined by the emphasis of value placed on obtaining an education, and the undertaking of obtaining an education. Hill (1999) defines academic orientation as having six components: aspirations, approval, familial and peer support, self-esteem, and locus of control. Work ethic is defined as the importance of steady employment and the expectation that one must labor to subsist and achieve socioeconomic advancement (Hill, 1999).

The five scales of faith, kinship bonds, role adaptability, academic orientation, and work ethic were operationalized using the aforementioned definitions, the conceptual model depicted in Figure 8, and the asset factors or subscales from Tables 7 and 8. Confirmatory factor analyses were run on each of the resulting scales to determine the interreliability of the scales.

Preliminary confirmatory analysis of the 39 assets as factors loaded on the five scales of faith, kinship bonds, role adaptability, academic orientation, and work ethic resulted in extremely low alphas. This result was attributed to the inclusion of nonrelated items at the subscale level. A second analysis was run on the constructs of the scales at the item level. Individual Items were initially included in each scale based on face validity. Reliability analyses were run to examine the relatedness of the items. Negatively loading items were reversed

and non-significant items were deleted to improve upon the alpha measurement. Results from this second analysis are described below.

Tables 9 – 13 show the scale reliabilities along with items loading and associated assets for each of the five scales of faith, kinship bonds, role adaptability, academic orientation, and work ethic. Scale reliability scores were calculated on the items listed in the table. Also listed are the assets corresponding to each item.

Table 9, faith, has a scale reliability of .8123 for a total of 29 items. Faith is the measure of religious attitude, belief, and commitment; involvement in religious activities, social support and resource; positive outlook for the future; and perseverance and endurance. Items that were judged to identify with these characteristics were loaded on 13 asset constructs: religious involvement, communication competence, equality and social justice, restraint, self-esteem, adaptability, social competence, resistance skills, achievement orientation, coping skills, positive view of the future, positive values, and integrity. All assets, except for religious involvement, were considered to be internal assets or positive characteristics of the student. The single asterisk (*) indicates the item was reversed coded for the purpose of inclusion in the scale.

Insert Table 9 about here

Table 10, kinship bonds, has a scale reliability of .7340 for a total of 31 items. Kinship bonds is defined as including family, community, and peer

Table 9
Faith – Scale Reliability, Items Loaded, and Corresponding Assets

Scale Name	Scale Reliability	Items Loaded	Corresponding Asset
Faith	.8123	38, 39	Religious involvement
		169	Communication competence
		115, 116, 117	Equality and social justice
		98A, 98B, 98C, 185	Restraint
		177	Self-esteem
		186	Adaptability skills
		187, 188	Social competence
		181, 182, 183, 184	Resistance skills
		176	Achievement orientation
		140, 141, 138, 139	Coping skills
		201	Positive view of the future
		124, 126	Positive values
		r123, r125, r144	Integrity

r = item was reversed to read positively

networks, extended family relations, significant non-related persons, support and assistance from relatives, and ties to others based on common residence or future plans. Corresponding items were loaded on 13 asset constructs: community values young adults, positive peer influence, peer risk involvement, other adult relationships, family and peer boundaries, parental support, student activity participation, young adults as resources, peer support, caring psychosocial school climate, constructive time use, balanced life, and engagement with faculty. Excepting the last subscale of engagement with faculty, all assets were external factors, indicating they are experiences provided to the student by his or her ecological systems.

Insert Table 10 about here

Table 11, role adaptability, has a scale reliability of .7652 for a total of 30 items. Role adaptability is defined as student's having the ability to be flexible as they take on multiple roles and maintain involvement in multiple areas. Role flexibility requires students to have adult role models, a holistic perspective, an enhanced sense of self-worth and responsibility, and high self-esteem, while developing problem solving and life skills. Items believed to characterize role adaptability represent aspects of 16 asset constructs. Seven of these constructs were listed as internal assets: other adult relationships, student activity participation, expectations, school boundaries, constructive time use, balanced life, and caring psychosocial school climate. Ten constructs were listed as

Table 10
Kinship Bonds – Scale Reliability, Items Loaded, and Corresponding Assets

Scale Name	Scale Reliability	Items Loaded	Corresponding Asset
Kinship Bonds	.7340	41	Community values young adult
		14, 18, 19, 20, 21, 22	Peer influence
		r2, 6, r34, 54g, 56, 57, 58, 60	Peer risk involvement
		3	Other adult relationships
		12, 13, 16, 17	Family and peer boundaries
		1b, 1c, 1d, 1e	Parental support
		62	Student activity participation
		45	Young adults as resources
		4, 5	Peer support
		11, 43	Caring psychosocial school climate
		54e	Constructive time use
		92, 93	Engagement with faculty

r = item was reversed to read positively

external assets: communication competence, positive identity, equality and social justice, restraint, cultural identification, self-esteem, adaptability skills, social competence, group orientation, and positive view of future. An asterisk (*) indicates the item was originally deleted from the corresponding asset category, but added to the scale based on the face validity of the concept measured and its uniquely significant relationship to the scale. For example, item 129 (overall, my father was a constant and influential presence in my life) had a negative and non-significant relationship to other factors measuring a positive view of the future. However, a consistent relationship between fathers and developing individuals has been equated with enhanced self-esteem and emotional balance (Barras, 2000; Pruett, 2000).

Insert Table 11 about here

Table 12, academic orientation, has a scale reliability of .7422 for a total of 36 items. Academic orientation is defined as students having high educational and occupational aspirations and expectations, which are supported by participation in related programs and activities, socialization skills, healthy social relationships, social and economic support, and positive adult role models. Items thought to characterize academic orientation were loaded on 18 asset constructs. Five constructs were listed as external assets: safe and caring community, school boundaries, caring psychosocial school climate, constructive time use, and creative activities. The remaining 13 assets were categorized as internal

Table 11
Role Adaptability – Scale Reliability, Items Loaded, and Corresponding Assets

Scale Name	Scale Reliability	Items Loaded	Corresponding Asset
Role Adaptability	.7652	54L	Other adult relationships
		54M, 61	Student activity participation
		31, 32	Expectations
		26, 27	School boundaries
		r30	Caring psychosocial school climate
		54k	Constructive time use
		64	Balanced life
		153, 167, 191	Communication competence
		189, 195, 197	Positive identity
		118, 166	Equality and social justice
		130	Restraint
		172, 173, 175	Cultural identity
		193, 196, 198	Self-esteem
		137, 194	Adaptability skills
		163	Social competence
		131	Group orientation
		*129	Positive view of the future

r = item was reversed to read positively
* indicates item was deleted from corresponding asset category.

assets: communication competence, restraint, interpersonal competence, integrity, social competence, cultural competence, group orientation, learning commitment, learning engagement, achievement orientation, achievement motivation, positive view of the future and engagement with faculty. An asterisk (*) indicates the item was originally deleted from the corresponding asset category, but added to the scale based on the face validity of the concept measured and its uniquely significant relationship to the scale as a whole. In table 12, item 114 (if I received a low grade my parents would be upset) was found to have a negative relationship with other factors measuring student's engagement with faculty. Deleting it from the asset factor improved the alpha. Item 114 was then added to the factor assessing academic orientation as it addresses issues pertaining to the influence of parental expectations. Inclusion of item 114 improved the alpha.

Insert Table 12 about here

Table 13, work ethic, has a scale reliability of .6452 for a total of 13 items. Work ethic includes future orientation, self-management skills, self-reliance, and entrepreneurial and self-employment skills. Work ethic is positively influenced by and also increases neighborhood stability. Items corresponding with characteristics of work ethic loaded on seven asset constructs. Three corresponding internal assets are: communication competence, positive view of the future, and positive values. Caring physical school climate, safe and caring

Table 12
Academic Orientation – Scale Reliability, Items Loaded, and Corresponding Assets

Scale Name	Scale Reliability	Items Loaded	Corresponding Asset
Academic Orientation	.7422	8M, 9	Safe and caring community
		8L	School boundaries
		r10	Caring psychosocial school climate
		54C, 54D, 54I	Constructive time use
		65C	Creative activities
		148, 149, 152, 154, 155, 158	Communication competence
		r82	Restraint
		159, 160	Interpersonal competence
		r128,137	Integrity
		108	Social competence
		165, 168	Cultural competence
		86, 97	Group orientation,
		77, 78, 84	Learning commitment
		90, 91	Learning engagement
		102, 104, 105	Achievement orientation
		100, 101	Achievement motivation
		106	Positive view of the future
		*114	*Engagement with faculty

r = item was reversed to read positively

* Indicates item was deleted from the corresponding asset factor.

community, young adults as resources, and creative activities, are the corresponding external assets.

Insert Table 13 about here

Tables 9-13 show the asset items related to the scales of faith, kinship bonds, role adaptability, academic orientation, and work ethic. Although findings from the exploratory factor analysis determined the subscale groupings that formed the 39 assets, the scale groupings were theoretically driven and findings were confirmed with reliability testing. Excepting the scale of work ethic (α = .6452) all alpha scores were significant as they were greater than .70.

Hypothesis 2 states that the assets of African American college students significantly relate to the five strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic. The null hypothesis implies that there is not a significant relationship between the 39 assets and the five strengths. As scale reliabilities for four of the five factors were above .70, and the fifth factor was borderline at .6452, the null can be rejected. Thus the frame for an ethnically appropriate model of assets specific to African American college students is established.

In summary, three progressive steps were taken to answer the guiding question relating to the assets or strengths particular to African American college students, and to develop an ethically appropriate model. In step one, exploratory factor analyses were conducted on the MSUSAS responses for Black and White

Table 13
Work Ethic – Scale Reliability, Items Loaded, and Corresponding Assets

Scale Name	Scale Reliability	Items Loaded	Corresponding asset
Work Ethic	.6452	157, 162	Communication competence
		200	Positive view of the future
		122, 127	Positive values
		r8D, r8E, r8G, r8I, r8K	Caring physical school climate
		48	Safe and caring community
		47	Young adults as resources
		65D	Creative activities

r = item was reversed to read positively

college students and compared. The findings provided statistical support for rejecting the null of H_1, and further showed that ethnicity influences assets. In step two, 39 assets were identified based on factor loadings specific to the Black students in step one. Step three involved the theoretical grouping of assets based on five scales of faith, kinship bonds, role adaptability, academic orientation, and work ethic. These scales form the frame of an ethnically appropriate assets model, which was tested and is presented in the section that follows.

Testing the ethnically appropriate model

Two basic themes have guided this study: 1) identifying the assets of African American college students, and 2) exploring how these assets are related to academic achievement. The first theme was addressed in the previous section, resulting in the development of an ethnically appropriate assets framework specific to African American college students. This section will examine the use of the frame as an indicator of academic achievement.

Review of the measures

Based on the findings of the previous sections an ethnically appropriate framework for examining assets was developed. The framework consisted of five scales, faith, kinship bonds, role adaptability, academic orientation, and work ethic. These factors were used as the independent or exogenous variables of an ethnically appropriate model predicting academic achievement. Three more factors, reconstructed community of support, student employment related to major, and student employment hours worked, were later introduced as

endogenous variables. Based on published research, these factors were believed to intervene between the dependent variable of academic achievement and the predicting factors of faith, kinship bonds, role adaptability, academic orientation and work ethic.

Independent variables. The faith scale measures students' religious beliefs, skills for peaceful conflict resolution and restraint, the importance of helping others, positive view of life and the future, and values of social justice and equality. Kinship bonds are the empowering and influential relationship ties and interaction students have with peers, parents, faculty, and the community. Role adaptability is the capacity to be flexible and adaptive to various role assignments, which are based on stage of development, cultural identity, and survival or thriving needs. Successful role adaptation is modeled through rules, and promotes an enhanced sense of competence, self worth, and self-esteem. Academic orientation is measured by students' bonding with the school, learning engagement, study habits, access to and use of resources, and competencies. Work ethic is measured by work related activities, values of honesty and integrity, planning and decision making skills, satisfaction with resources and supports, and feelings of security and safety.

Intervening variables. Introduced in this section are three intervening or endogenous variables: reconstructed community of support, student employment related to major field of study, and student employment hours worked per week. Reconstructed community of support was defined as students' school related network of individuals and resources who share common goals, values, and

norms, and whom provide support and encouragement. This variable was measured by items 7B-7M (how often do you speak with the following [MSU related] people about important issues, and/or concerns for your future?) and RLIVTY (reversed demographic item asking students to indicate where they were living while attending MSU). The items 7B-7M measure the active networks students have which are related to MSU and the East Lansing community. The item measuring where student lives while attending MSU measures the physical community of individuals who share common goals, values, and norms. For example, students residing in university housing are perceived as being physical and psychological members of a community of students. The reliability score for this scale was .7884.

The remaining two intervening variables measure the quality and quantity of students' employment. The quality of student employment is perceived as being related to the students' major field of study. Major related student employment was measured by dichotomous items 66 (my summer employment is related to my declared major) and 67 (my employment during the school year is related to my declared major). Although the reliability for score for these two factors was <.70 at .6204 this scale was retained as no other items were related to school major.

The quantity of student employment was measured by the number of hours students were employed per week as ascertained in MSUSAS item 55 (how many hours per week do you work?). Students indicated on a scale of 1-5

if they worked 0 hours = 1; 1-7 hours = 2; 8-16 hours = 3; 17-29 hours = 4; or 30 or more hours = 5. As this is a single item scale, the reliability is 1.00.

Dependent variable. The dependent variable of academic achievement was measured by students' grade point average as self reported in the MSUSAS demographic section. Grade point averages ranged from a low 1.66 to a high of 3.86, with a mean of 2.64 being equal to a letter grade of C. The reliability for this one-item scale was 1.00.

Preliminary analysis. Prior to analyses of the data, missing values for the variables were replaced by the system mean to provide a final data set sample of 173. Using this transformed data set the nine model factors were recomputed based on the scales developed previously. Table 14 depicts the psychometric properties of the variables used in the model. Listed are the respective reliabilities, means, standard deviations, and range of response scores. Two items, student employment hours worked per week and academic achievement based on grade point average have reliability scores of one (1.0) as they are one-item measures.

Insert Table 14 about here

Table 15 shows the correlations for each variable. Calculations were conducted on SPSS, which limits variable labels to eight characters. Therefore abbreviations were used for all variables except faith: KINSHIP = kinship bonds; ROLEADAP = role adaptability; ACADOREN = academic orientation;

Table 14
Psychometric Properties of the Model Variables.

VARIABLE	RELIABILITY SCORE	MEAN	SD	RANGE OF SCORES
FAITH	.8123	97.54	8.683	76-117
KINSHIP BONDS	.7340	74.019	9.486	52-99
ROLE ADAPTABILITY	.7652	90.891	8.516	70-110
ACADEMIC ORIENTATION	.7422	116.045	9.136	91-138
WORK ETHIC	.6452	28.574	4.644	17-41
RECONSTRUCTED COMMUNITY OF SUPPORT	.7941	25.166	6.714	15-55
STUDENT EMPLOYMENT - RELATED TO MAJOR	.6063	.547	.736	0-2
STUDENT EMPLOYMENT - HOURS WORKED PER WEEK	1.00	2.503	1.219	1-5
ACADEMIC ACHIEVEMENT – GPA	1.00	2.645	.605	1.66-3.86

N = 173

WORKETHC = work ethic; RECOMSPT = reconstructed community of support; STUEMPMJ = student employment related to major; STUEMPHR = student employment hours worked; and ACADACHV = academic achievement. Significant correlations are indicated by * (one asterisk) if significance is at the .05 confidence level and ** (two asterisks) if at the .01 confidence level. Significant relationships provided guidance for hypothesizing alternative path diagrams in the structural equation model proposed to test the influence of assets on academic achievement of African American college students.

Insert Table 15 about here

Guidelines for testing and assessing the fit of the models

The relationships among the independent, intervening, and dependent variables were examined using Amos 4.0 (Arbuckle, 1997) software program which specifies and evaluates structural equation models as path diagrams. To determine the measure of fit for each model, the probability value (p) for the chi-square statistic (X^2) or discrepancy term, Normed Fit Index (NFI) and Root Mean Square Error of Approximation (RMSEA) were examined. Statistically significant X^2 at $p < .05$ indicates that the model does not fit the given data. Based on Bollen (1989) NFI measurements of fit are interpreted as an ideal fit if 1.00; excellent fit if 0.90-0.99; average fit if 0.85-0.89; and poor fit if <0.85. RMSEA measurements are interpreted as an excellent fit if 0.00-0.05; moderate fit if 0.05-0.08; acceptable fit if 0.08-0.10; and poor fit if >0.10. MacCullum, Browne and

Table 15
Correlations of Model Variables

	FAITH	KINSHIP	ROLEADAP	ACADORN	WORKETHC	RECONSPT	STEMPMJR	STEMPHRS	ACADACHV
FAITH	1.000								
KINSHIP	-0.152	1.000							
ROLEADAP	** 0.637	** 0.225	1.000						
ACADORN	** 0.508	0.113	** 0.727	1.000					
WORKETHC	** 0.249	0.029	** 0.332	** 0.393	1.000				
RECONSPT	** 0.265	-0.030	* 0.193	* 0.188	** 0.333	1.000			
STEMPMJR	0.053	0.042	0.051	0.027	0.096	0.144	1.000		
STEMPHRS	* -0.199	-0.101	** -0.222	* -0.177	-0.024	* -0.161	** 0.226	1.000	
ACADACHV	0.113	-0.060	0.094	0.133	0.011	-0.031	0.145	0.131	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Sugawara (1996) also determine RMSEA guidelines rejecting close fit and not-close fit. Given an excellent fit based on RMSEA < .05, if both the RMSEA lower bound (RMSEALO) and higher bound (RMSEAHI) are below 0.05, reject the not-close fit and do not reject the close fit. If the confidence interval bounds represented by RMSEALO and RMSEAHI straddles 0.05, neither the close fit nor not-close fit can be rejected. If both the RMSEALO and RMSEAHI are above 0.05, the close fit can be rejected, but the null hypothesis of not-close fit cannot be rejected. Rejecting the not-close fit hypothesis provides a stronger support for confirming (Crano & Mendoza, 1987) a close fit of the theoretical model. Power estimates were also examined to determine the power of rejecting any hypothesis about fit (MacCallum, Browne, & Sugawara, 1996). These estimates were based on RMSEA, degrees of freedom (df) and sample size (N). In general, when df and N are both large (e.g. df = 100, N = 500) the power estimates for closeness of fit is a perfect 1.00. When both are low (e.g. df = .081, N = 100) power is extremely low, and the likelihood of rejecting any hypothesis is diminished.

Following are the proposed overall and subsequent path models in relation to their respective hypotheses. For each the best fitting models, measure of fit findings and power estimate are evaluated based on the foregoing guidelines.

What is the relationship between assets and the academic achievement of African American college students?

Overall theoretical model. The overall theoretical model shown in figure 2 depicts the hypothesized relationships between all independent, intervening and dependent variables. Path A depicts a direct model or direct relationship between the independent variables of faith, kinship bonds, role adaptability, academic orientation, and work ethic, with the dependent variable of academic achievement. Path B depicts reconstructed community of support as an intervening variable influencing the relationship between independent variables faith, kinship bonds, role adaptability, academic orientation, and work ethic, and dependent variable academic achievement. Path C diagrams the relationship between independent variables role adaptability, academic orientation, and work ethic with dependent variable academic achievement when mediated by student employment as it relates to the student's field of study and the number of hours worked. Path D diagrams the relationship between independent variable work ethic with dependent variable academic achievement when influenced by the number of hours students are employed per week. Except for Path D, all other paths were hypothesized to positively relate to academic achievement. In the latter path the number of hours students work was believed to negatively influence academic achievement.

Insert Figures 2 and 9 about here

Models of fit calculations were run on the proposed models using Amos 4.0. Prior to processing analysis, Amos requires that unobserved variables

Figure 2:
Overall Theoretical Model

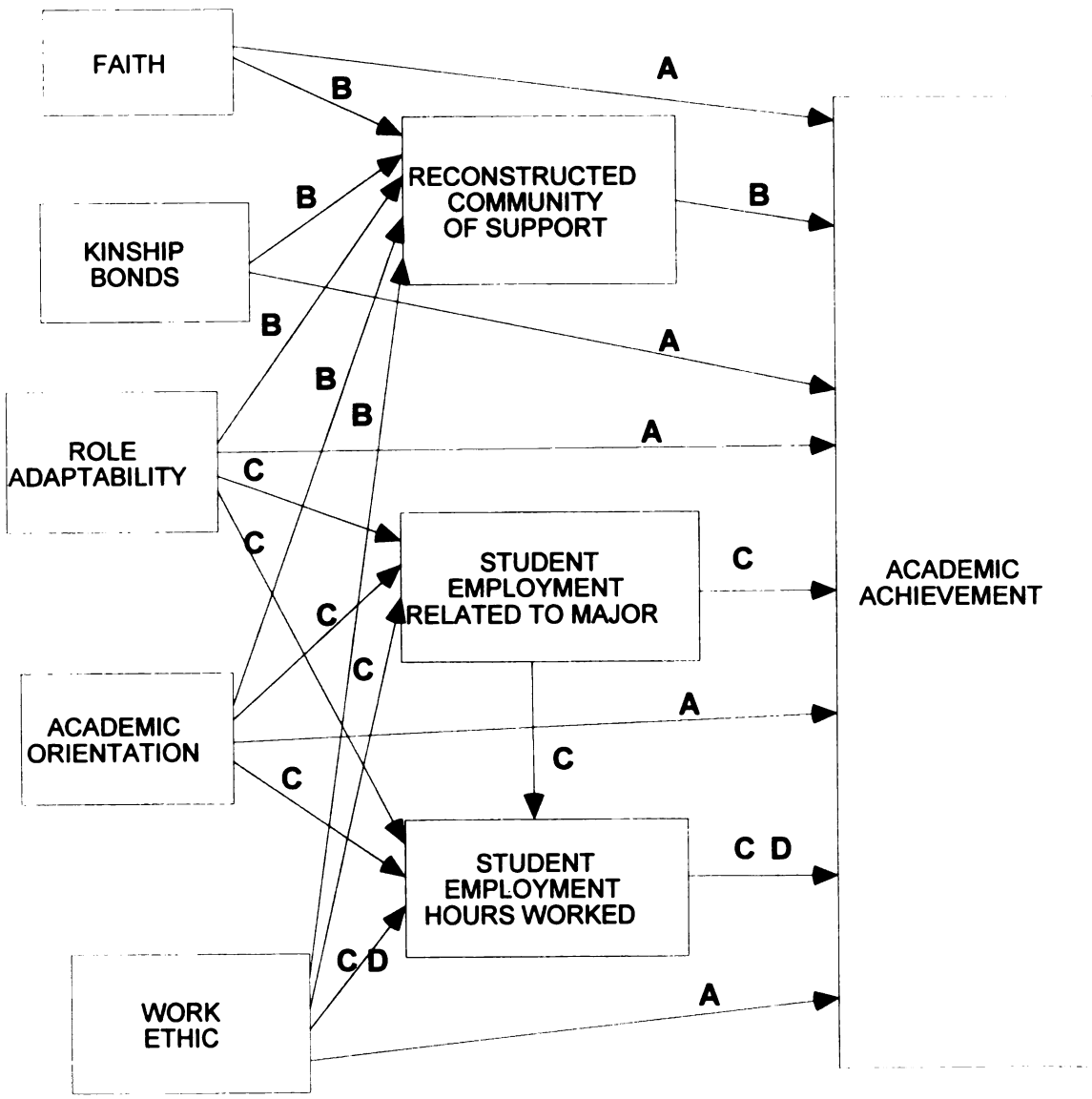
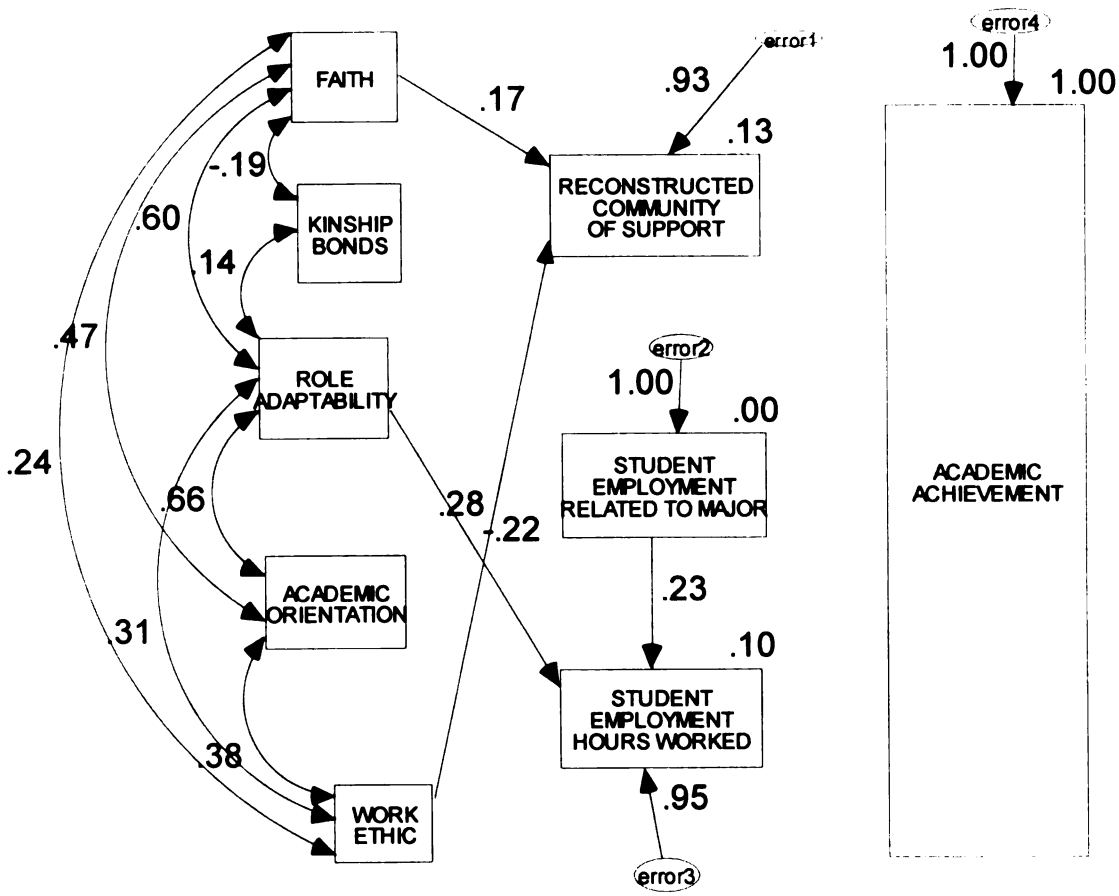


Figure 9
Best-fitting Overall Theoretical Model



accounting for unexplained variances be added in relation to all endogenous variables. Hence the error variables with mean (0) and variance (1) parameters indicated as noted in the proposed model. After running the initial analysis, covariant relationships between observed variables were diagrammed based on the modification indices. Using the probability ($p < .05$) test for significance of regression weights non-significant paths were deleted. Subsequent tests were run until modification indices were exhausted. The resulting model was examined for its goodness of fit.

Findings. Figure 9 shows the best fitting overall model with only statistically significant paths retained. The independent variables were all significantly related to each other, with faith and role adaptability correlating to each of the other variables. Kinship bonds were related to only two other variables, faith and role adaptability. The inverse relationship between faith and kinship bonds, indicating that when one increased the other decreased, was the only negative covariant relationship. Only four causal paths were significant. Faith and work ethic were found to have a positive influence on reconstructed community of support. Role adaptability negatively influenced the number of hours students worked. Student employment related to major field of study was positively related to the number of hours students were employed. No proposed paths linking either the independent or intervening variables to academic achievement were retained, as they were not significant.

Goodness of fit. The resulting overall model shown in figure 9, indicates a best fit for the given data [X^2 (df 8, N = 173) = 12.55, $p < .001$, NFI = .998,

RMSEA = 0.058 (RMSEALO = .000, RMSEAHI = .115)]. Based on the RMSEA bounds guidelines pertaining to RMSEA confidence intervals straddling >05, and low power estimates, neither the close fit nor the not-close fit may be rejected. Therefore the theoretical model is nonconfirmed. Realizing the removal of variables may change the regression weights and significance, thus influencing the goodness of fit, further analyses of the proposed paths were conducted in separate path models.

Hypothesis 3: The five assets of faith, kinship bonds, role adaptability, academic orientation, and work ethic are indicators of academic achievement.

Proposed Model. Path A is diagramed in Figure 10 and shows a direct relationship between each of the independent variables of faith, kinship bonds, role adaptability, academic orientation, and work ethic, with the dependent variable of academic achievement. Amos 4.0 requires that unobserved predictors or factors be added to endogenous variables to account for error measurements. Error variables are assigned a mean of 0 (zero) and a variance of one (1). Figure 11 shows the best fitting model with path coefficients.

Insert Figures 10 and 11 about here

Findings. Only faith was found to have a significantly positive influence on academic achievement. Significant covariant relationships were also found connecting the independent variables.

Figure 10
Hypothesis 3: Proposed Direct Model of Independent Variables Predicting Academic Achievement

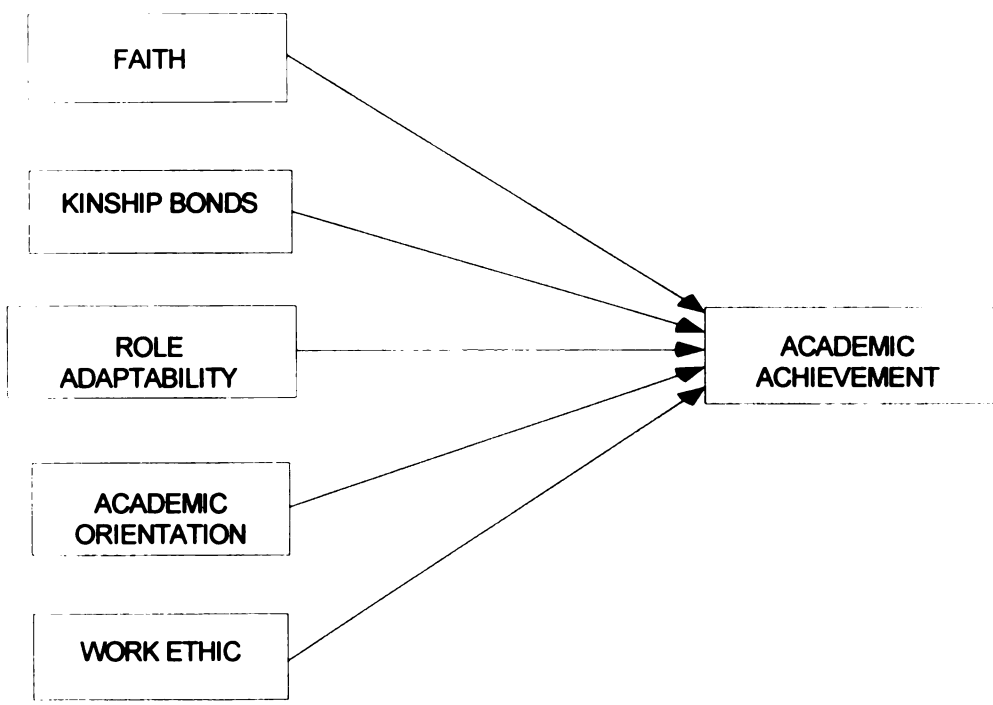
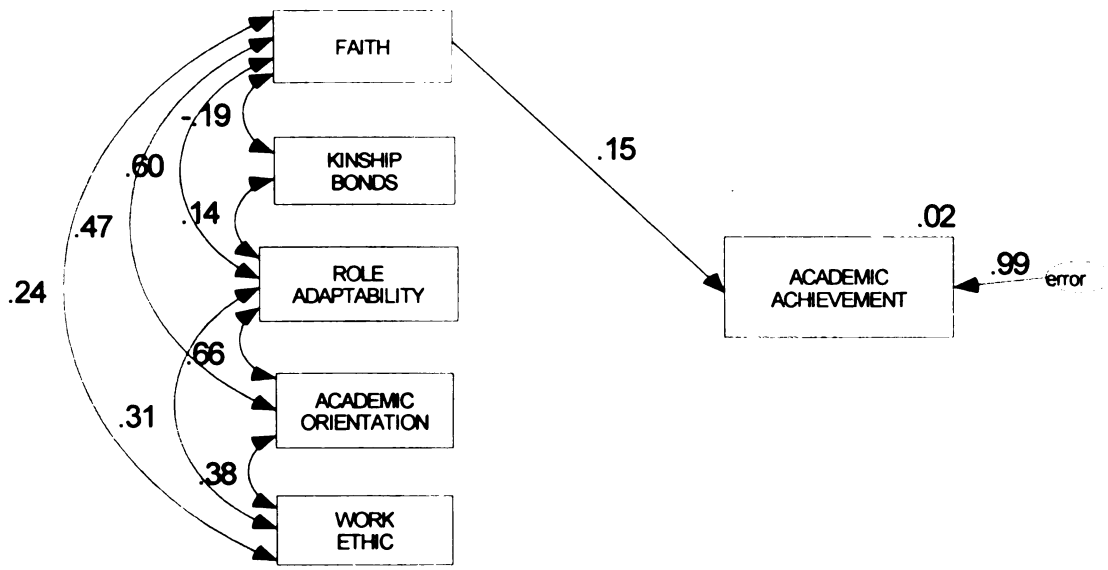


Figure 11

Hypothesis 3: Best Fitting Direct Model of Independent Variables Predicting Academic Achievement



Goodness of Fit. The best fitting model for H_3, shown in figure 11, indicates a moderate fit of the model to the given data based on the non-significance of the chi-square probability (p = .490) and fit measures [X^2 (df 6, N = 173) = 5.4, NFI = .999, RMSEA = .000]. However, based on the confidence interval (RMSEALO = .000, RMSEAHI = .094) and low power estimate measures, neither the close fit hypothesis nor the null hypothesis of not-close fit can be rejected. Therefore, the model is nonconfirmed.

Hypothesis 4: Students with strong faith, kinship bonds, role adaptability, academic orientation, and work ethic are more likely to reconstruct communities of support, thus increasing incidences of academic success.

Proposed model. Proposed Path B, diagrammed in figure12, predicts that each of the independent variables will have a causal influence on students' reconstruction of communities of support intended to increase incidences of academic success. Amos 4.0 requires that unobserved predictors or factors be added to endogenous variables to account for error measurements. Error variables are assigned a mean of 0 (zero) and a variance of one (1). Figure 13 shows the best fitting model with path coefficients.

Insert Figures 12 and 13 about here

Findings. Only faith and work ethic were found to have significant influence on the reconstruction of a community of support. However, academic achievement was not significantly related to reconstructed community of support.

Figure 12

Hypothesis 4: Proposed Model of Variables Predicting Reconstructed Community of Support Influencing Academic Achievement

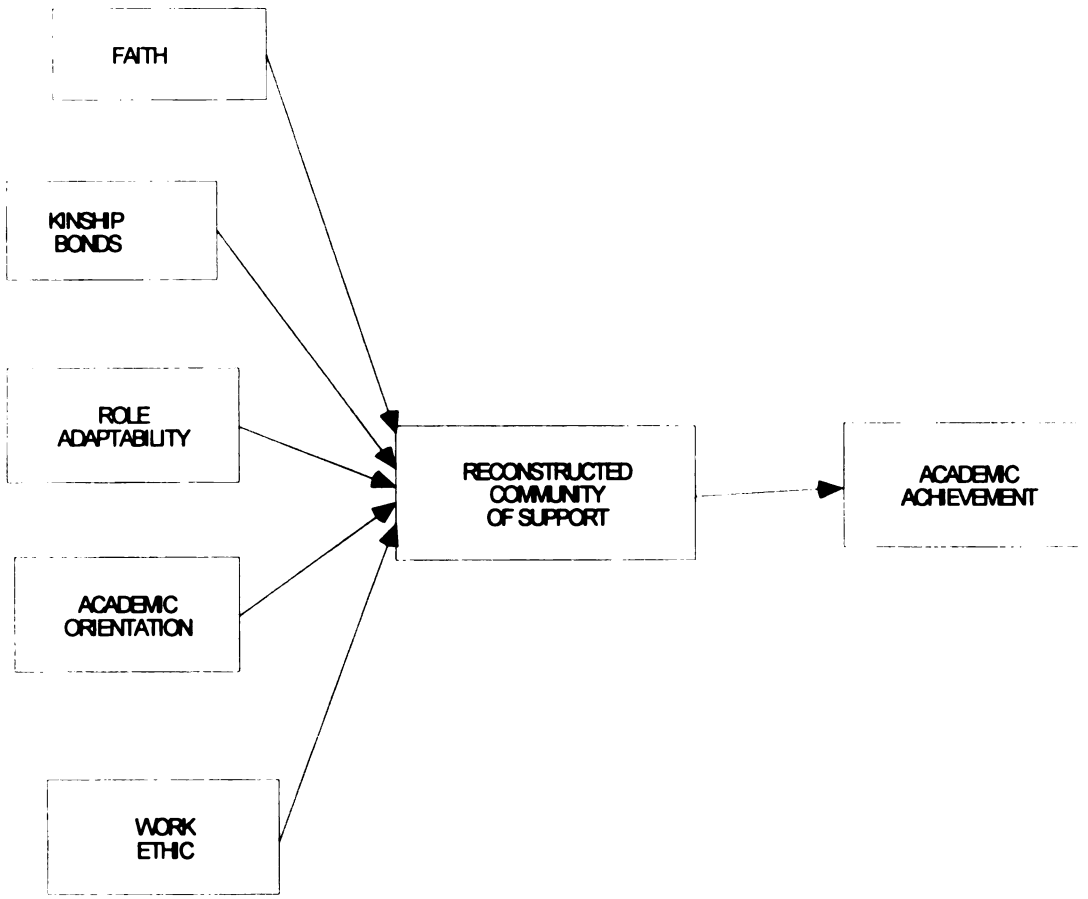
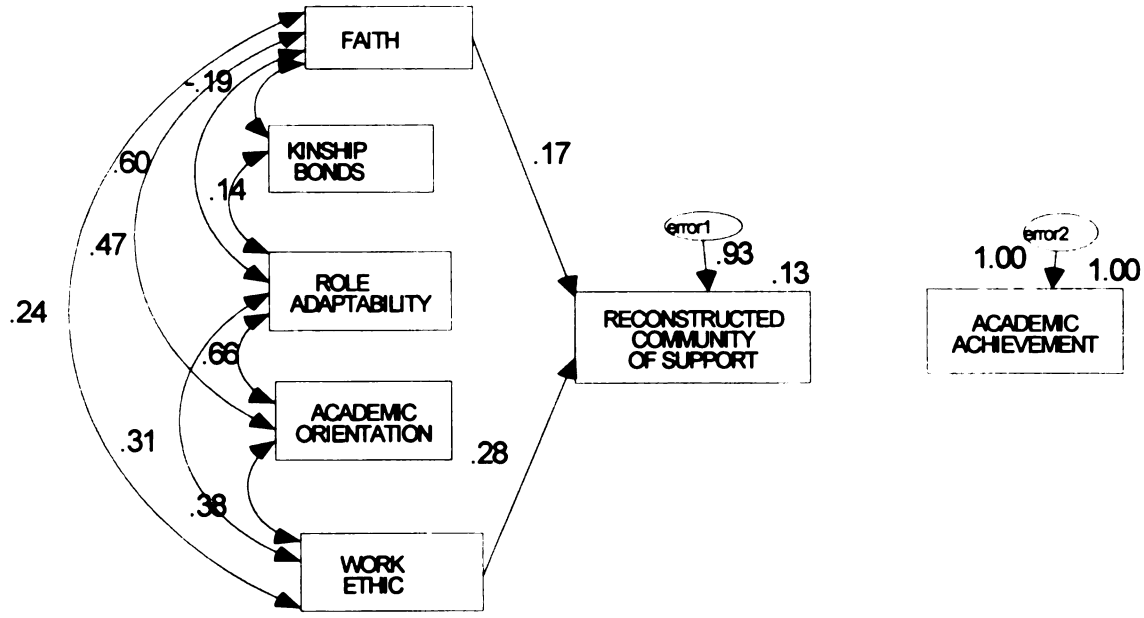


Figure 13

Hypothesis 4: Proposed Model of Variables Predicting Reconstructed Community of Support Influencing Academic Achievement



Goodness of fit. The best fitting model for H_4, shown in figure 13, indicates a moderate fit of the model to the given data [X^2 (df 11, N = 173) = 11.36, p > .001, NFI = .998, RMSEA = .0139]. As the confidence interval straddles 0.05 (RMSEALO = .000, RMSEAHI = .0819) and the power estimate is low (df = 11, N=173) neither the close fit hypothesis nor the null hypothesis of not-close fit can be rejected. Therefore the model is nonconfirmed.

Hypothesis 5: The assets of role adaptability, academic orientation, and work ethic influence the academic relatedness of student employment and the number of hours worked, thus affecting academic achievement.

Proposed model. Proposed Path C, diagrammed in figure14, predicts that role adaptability, academic orientation, and work ethic will each influence students' employed in positions related to their major and the number of hours they work. In turn, the relatedness of employment and hours worked will influence academic achievement. Amos 4.0 requires that unobserved predictors or factors be added to endogenous variables to account for error measurements Error variables are assigned a mean of 0 (zero) and a variance of one (1). Figure 15 shows the best fitting model with path coefficients.

Insert Figures 14 and 15 about here

Findings. Only one proposed causal path was found significant. Role adaptability has a negative influence on student employment hours, indicating that the number of hours students work decreases in relation to their ability to

Figure 14

Hypothesis 5: Proposed Model of Variables Predicting Student Employment Influencing Academic Achievement

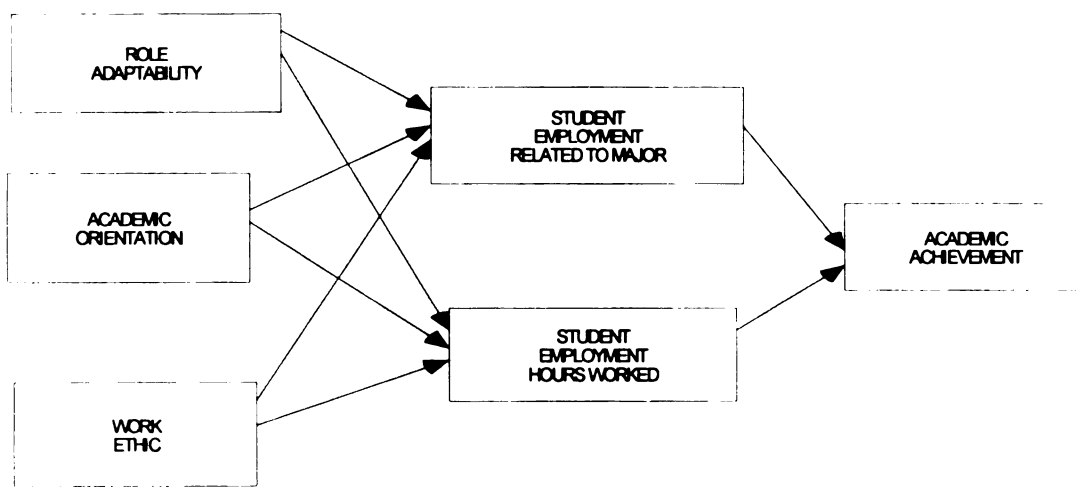
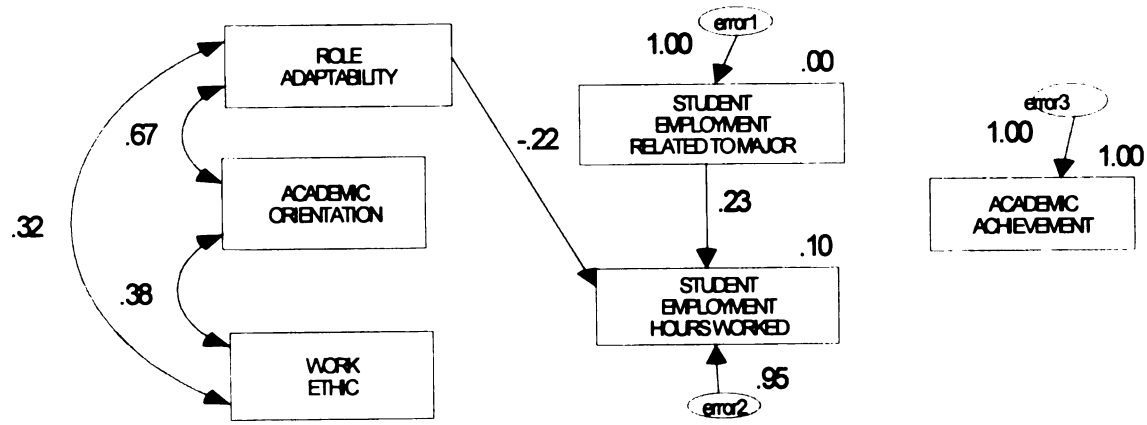


Figure 15
Hypothesis 5: Best Fitting Model of Variables Predicting Student Employment Influencing Academic Achievement



adapt to their roles and participate in varying student activities. Based on modification indices, covariant relationships were indicated, and the relatedness of student employment related to major was found to have a positive influence on the number of hours students worked.

Goodness of Fit. The confirmatory factor analysis of the hypothesized model shown in figure 15 indicates a moderate fit of the model to the given data [X^2 (df 10, N = 173) = 9.701, p > .001, NFI = .997, RMSEA = .000]. As the confidence interval straddles 0.05 (RMSEALO = .000, RMSEAHI = .080) and the power measures are low (df = 10, N=173) neither the close fit hypothesis nor the null hypothesis of not-close fit can be rejected. The model is nonconfirmed.

Hypothesis 6: A strong work ethic encourages the number of hours students work negatively affecting academic achievement.

Proposed model. Figure 16 shows that when measured alone, work ethic is hypothesized to have a positive influence on the number of hours students work, thus decreasing incidences of academic achievement. Error variables are added to endogenous variables to account for error measurements. As unobserved variables, they are assigned a mean of 0 (zero) and a variance of one (1). Figure 17 shows the best fitting model with path coefficients.

Insert Figures 16 and 17 about here

Figure 16

Hypothesis 6: Proposed Model of Work Ethic Predicting Hours Worked and Influencing Academic Achievement

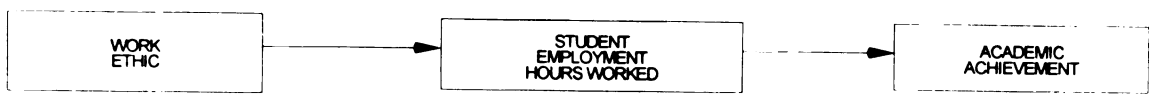
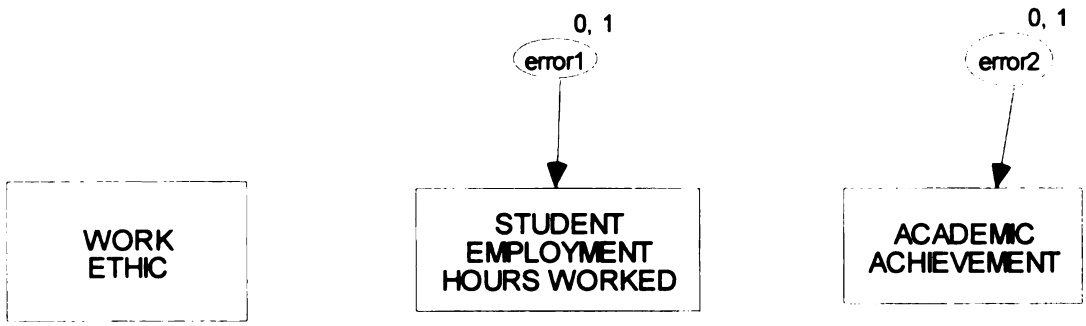


Figure 17

Hypothesis 6: Best Fitting Model of Work Ethic Predicting Hours Worked and Influencing Academic Achievement



Findings. Work ethic did not have a significant affect on the number of hours students were employed. Neither was student employment hours found to have a significant influence on academic achievement.

Goodness of Fit. The model of fitness for H_6 shown in figure 17 indicates a moderate fit of the model to the given data [X^2 (df 1, N = 173) = .317, p > .001, NFI = .999, RMSEA = .000]. As the confidence interval straddles 0.05 (RMSEALO = .000, RMSEAHI = .166) and the power measures are extremely low (df = 1, N=173) neither the close fit hypothesis nor the null hypothesis of not-close fit can be rejected. The model is therefore nonconfirmed.

Summary

The purpose of this exploratory investigation was to identify the assets most characteristic of African American college students and most indicative of academic achievement for African American college students in a large predominantly White institution. Of particular interest for this investigation was: (a) the testing of a theoretical model that incorporates ethnicity (i.e. African American) and assets, and (b) the development of a framework that examines the impact of ecological systems on the matriculation and academic achievement of African American college students. Therefore, the data analysis consisted of two parts: the development and testing of an ethnically appropriate model and the hypothesis testing of variables predicted to indicate academic achievement. Three specific research questions were addressed: 1) What are the assets or strengths particular to African American college students? 2) How are assets related to the strengths of Black families? 3) Do assets influence incidences of

academic achievement? Two statistical measures, factor analysis and path analysis modeling, were used to answer these questions and address the hypotheses associated with each. The following chapter will discuss the findings pertaining to each question, consider the limitations that may have influenced the findings, and draw implications relevant to institutes of higher education in regards to research, policy, and practice.

Chapter 5

DISCUSSION

Three research questions guided this study: (1) What are the assets or strengths particular to African American college students? (2) How are these assets related to Hill's (1999) strengths of Black families? And (3) how are these assets related to the academic achievement of African American college students? These questions were used to form and test an ethnically appropriate model of assets for use with African American college students. Thirty-nine assets were found characteristic of Black college students attending a predominately White university, and were significantly related to the strengths of Black families. Using the resulting strengths-based asset model, the grouping of assets correlating to faith were found to significantly influence academic achievement. In this chapter, explanations of the findings are further discussed, citing relevance to previous research, limitations affecting the validity or generalizability of the results, and implications for policy and practice.

This study was unique for four reasons. First, an asset-based approach was used to examine African American college students attending a predominately White university. Most studies regarding Blacks at predominately White universities are deficit-based, being focused on attrition rates and causes. Second, previous studies of assets have been focused on youth between the ages 12-17. A few studies had also been done to examine the assets of children and youth from birth to17 to assess what parents, schools, and community needed to provide children for them to grow into successful adults. However, no

published studies had ventured to examine the assets of college students aged 18-23 typically thought to be late adolescents or young adults. Third, as a strengths-based study, this research was focused on the role of culture as an influence of assets. Culture was threefold as it encompassed stage of life (late adolescence/young adulthood), African American ethnicity, and the university based ecological context. The stage of life and ecological setting addressed developmental issues, while ethnicity provided a dimension usually overlooked for its influence on behaviors, attitudes, and interactions with proximal settings and systems. Therefore, being African American was perceived as influencing the behaviors, attitudes and interaction of Black college students with the predominately White school setting. Finally, this study provided the development and testing of a strengths-based culturally sensitive model. Based on the identification of assets presented by African American students the resulting model was used to distinguish those assets most indicative of academic achievement.

Findings from this study were founded on the premise that assets of college students would differ from those of youth based on appropriate stages of lifespan development theories (Erikson, 1993; Jessor, 1993) and affiliated ecological systems (Bronfenbrenner, 1989; Jessor, 1993). Thus the use of the MSUSAS which was adapted from the Search Institute's ABQ (Benson, 1990; Blyth, 1993) for use with college students ages 18-23. For youth aged 12-17, life stage development affected the positioning and interactions of microsystems. As dependent minors the foremost proximal system was family, followed by school

and community. College students aged 18 –23 having reached the legal age of majority are developmentally viewed as young adults having achieved a level of independence. As college students attending a residential university their foremost proximal systems were school and community, followed by family. This shift in positioning of microsystems affected how and with whom college students interacting on a daily basis. Thus school and community became primary providers of experiences and characteristics referred to as external assets (Scales & Leffert, 1999). Internal assets were results of culmination of internalized lifetime experiences and characteristics provided to the college students.

Hypothesis 1: The assets or strengths of African American college students significantly differ from the assets of White students.

While this was not a comparative study, assets were examined specific to Black and White students to provide statistical basis for examining the influence of culture on assets and to identify the assets characteristic of and distinctive to Black young adult college students attending a predominantly White university. Overall, the assets of White students were found to directly conform to the Search Institute's assets (as factor loadings were exclusive to the defining criterion of assets. For example, all items loading on the factor of 'community values young adults' are exclusive to the question assessing if students feel various school and community personnel hear and address their opinions and concerns. White students were also found to place emphasis on relations with school personnel rather than peers, to receive parental support, to be satisfied

with school resources, and to participate in structured time use activities. In comparison, factors for Black students were less conformed to criterion for assessing the presence of assets. Rather their asset groupings were inclusive of multiple asset measurements. For example, items loading on the factor of 'community values young adults' included questions assessing if students felt various school and community personnel heard and addressed their opinions and concerns, and if the community made students feel welcome. This implied that Black students felt valued by the community if accepted, as both their interests were heard and addressed and they were made to feel received and appreciated. In comparison, White students did not indicate a need for acceptance. Rather their response was perceived as being empowered.

This non-conformity to standard assets criterion for Black students was seen as evidence of multidimensionality, divergent thinking, and a holistic worldview that favors considering the action as well as the attitude guiding the behavior (Nichols, 1976). While White students seemed to see assets one-dimensionally, Blacks were more prone to define them two and three dimensionally. For example, based on responses of White students, a caring school climate was indicated by satisfaction with physical MSU resources and centers. For Black students, a caring school climate was evaluated as involving satisfaction with both physical and psychosocial components. More specifically, physical components consisted of resource centers, whereas psychosocial components were based on whether students had been embarrassed or "put

down" by professors, discussion of concerns with resource center staff, support of nonparent adults, having needs met by social systems.

Another example of multidimensionality and divergent thinking was a noted difference between White and Black students' measurement of religious involvement. For White students, religious involvement included religious activity, importance of religious beliefs, and being pressured to attend faith-based services of religions other than one's own. For Black students, religious activity involvement, importance of religious beliefs, and the frequency of interactions with faith-based leaders to discuss concerns, indicated religious importance. While the former seems to question one's acceptance of their religious beliefs and commitment to those beliefs, the latter implies that one's religious involvement provides role models as resources for guidance and support.

The number of factors accounting for significant variance in loadings for Black versus White students also evidenced multidimensionality. Black students had more factor groupings accounting for significant variance, for a total of 39 assets. Although the majority of these were found to correspond with similar assets identified for White students, six were found to be distinctive to Blacks and consistent with research regarding cultural characteristics of African Americans (Billingsley, 1992; Boykin, 1991; Hill, 1999;Ogbu, 1992). These assets (psychosocial school climate, balanced life, adaptability skills, group orientation, coping skills, and engagement with faculty) were also interrelated to each other, providing support for one and influencing others. For instance, Billingsley (1992), Hill (1999), and Hudgins (1992) noted adaptability and coping skills as being

paramount to the success of African Americans, whereas Cabrera et al. (1999) indicated that psychosocial school climate was influential in Black student's adjustment to school and continued matriculation. Therefore, school climate influences Black students' ability to adjust, endure, and contend with adversity. Boykin's (1991) proposes that Blacks emphasize communal group orientation and harmony or balance. The purpose of adapting is to create balance to one's systems, so again adaptability is supported. Ogbu (1992) notes that social engagement with faculty is instrumental to educational achievement. This supports the theme of socialization, which was found to undergird the assets of Black students.

In addition to the aspect of multidimensionality, a second theme underlying the assets of Black college students was the importance of the social aspect, interaction with peers and significant other adults. Socialization or social competence was found to carry more importance than those assets affiliated with academic commitment, motivation, and orientation. The theme of socialization was also found integrated with other internal assets of positive identity, positive values, and learning commitment, and with the external assets of religious involvement and constructive time use. Billingsley (1992) and Ogbu (1981) support the importance of the social aspect. The latter notes that learning for Black students is a social dimension.

Another interesting difference between the assets of Black and White students was the order of factor loading and the order of items loading on each factor. Order of loading indicated importance of the asset in relation to the other

assets. For example, Black students placed overall emphasis on external assets provided by their community of peers whereas White students placed emphasis on external assets provided by school based adult personnel. In other words, Blacks were more likely to informally discuss concerns and problems with fellow students, while White students would access formal channels and speak with faculty and support staff. Regarding internal assets, Black students emphasized interdependent themes of social competencies and interactions (Boykin, 1991). White students prioritized independent themes of positive values and identity.

At the sublevel of items loading on factors, importance of the item concept was indicated by its position of loading in relation to other items loading on the same factor. One example concerns the personnel loading on the measurement of community welcomes youth. Black students prioritized MSU and East Lansing police over MSU faculty, administration and support staff. White students prioritized MSU staff, over East Lansing community members, MSU administration, and faculty. This measurement would indicate that students have primary and most frequent contact with the personnel loading first. As students, both groups would be expected to indicate MSU faculty first, as daily contact in classrooms is assumed. Reasons for frequent contact between Black students and police can only be speculated, as no items addressed reasons students might meet with various community personnel. Based on the duties of the police as law enforcers, speculations regarding reasons for contact would include students' risk behavior involvement and issues of safety and protection.

However, current example of events regarding accounts of Blacks and police must also be considered, and should be examined in future studies.

In summary, the assets of African American college students were found to significantly differ from those of White students. Assets were culturally based, defined multidimensionally, and placed emphasis on the importance of social networks and communication. As the assets of Black students did not easily conform to criterion set by previous assets research, new categories were deemed necessary for organizing the assets and assessing how they might influence academic achievement. For this purpose the strengths of Black families were examined as culturally appropriate organizing categories.

Hypothesis 2: The assets of African American college students significantly relate to the five strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic.

Assets were defined as the personal positive characteristics and experiences provided to and by Black students to increase their chances of academic success. The five strengths of faith, kinship bonds, role adaptability, academic orientation, and work ethic were identified as coping strategies used by Black families to support survival and increases societal success (Billingsley, 1992; Hill, 1999). The degree to which these strengths were exhibited in the family was related to how entrenched the Black family was in the Black community, and their quality of interactions with the larger American society. These skills were then transmitted to Black children through experiences, ethical teachings, and modeling (Barker & Hill, 1996). Once the children matured to

adulthood and achieved a level of independence it was expected that they would begin to employ these strengths to cope with societal demands as necessitated by the environment. The less congruent the environment to the Black family and community, the more likely the needs for these coping strategies. Therefore, it was believed that these coping strategies would be evidenced among Black students attending a predominantly White university (Dornbusch, 2000; Epps et al., 1991).

Items grouped in the 39 assets of Black students were used to operationalize the five Black family strength factors of faith, kinship bonds, role adaptability, academic orientation, and work ethic (Hill, 1999). To underline the importance of socialization, each of the five scales included items related to social relations or interpersonal competence. All factors were found to contain both external and internal assets, indicating that while these strengths may be identified as personal positive traits of Black students, they are also positive characteristics and experiences provided and supported by external microsystems of school, community and family.

Four of the five developed scales were found to be statistically significant. Only work ethic was not found to be statistically significant. There were a few reasons postulated to explain this lack of significance. First, the work ethic scale did not include a measure of the number of hours student worked, as that item was used specifically as the measure of student employment hours worked. Therefore, work ethic may not have fully measured what it purported to measure. Another possible explanation is that work ethic did not include any asset items

considered distinctive to African American college students, (i.e. psychosocial school climate, balanced life, adaptability skills, coping skills, group orientation, or engagement with faculty). Therefore work ethic might not have been an accurate reflection of a culturally based strength. In addition to the aforementioned issues, another possible explanation lies in the fact that the other four factors were perceived as adaptive strategies used to aid students in their educational goals whereas work ethic was perceived to counteract or interfere with academic achievement. Rather than aiding students' educational attainment, work ethic was seen as a risk factor hindering academic achievement based on the number of hours students worked.

As a whole, the results of this study supported the hypothesis that the assets of African American college students are significantly correlated to the four strengths of faith, kinship bonds, role adaptability, and academic orientation. For Black students, assets become the individual adaptive strategies or Black family strengths used to succeed academically. While Black students internalize these strengths, they are continually supported by the ecological systems of school, community, and family. It was also noted that not all strengths were equated with academic achievement, and that work ethic may be counter to academic success if the number of hours worked detract from academic pursuits.

Hypothesis 3: The five assets of faith, kinship bonds, role adaptability, academic orientation, and work ethic are indicators of academic achievement for African American college students.

Using the assets as grouped by the five strengths of faith, kinship bonds, role adaptability, and work ethic, an ethically appropriate model was developed and then used to examine the influences of assets on the academic achievement of Black college students. The direct model, which examined direct causal paths between each of the five strengths and academic achievement, concluded that faith only had a significant positive influence on academic achievement. Faith was defined by Hill (1999) as including strong religious beliefs and commitment, involvement in religious activities, a social support and resource, encouraging a positive outlook for the future, perseverance and endurance, and providing meaning for life. Faith as defined by the assets of Black college students included the external asset of religious involvement, and the internal assets of communication competence, equality and social justice, restraint, self-esteem, adaptability, social competence, resistance skills, achievement orientation, coping skills, positive view of the future, positive values, and integrity.

The importance of faith as an indicator of academic achievement is not surprising as it is supported by research regarding religiosity and Black students (Hill, 1999; McAdams, Booth & Selvik, 1981; Steward & Jo, 1998). Faith and religious orientation has been shown to increase levels of educational attainment, economic advancement, and marriage survival, and to decrease incidences of risk factors. Its significance as an indicator may be due to its implications of commitment to beliefs, perseverance, endurance, and positive view of future. In other words, students with strong faith may be more inclined to persist with their educational attainment, as a result of their commitment to academic pursuit,

personal qualities of perseverance and endurance, and positive view of the end goal.

While it was not surprising that faith was found significantly related to academic achievement, what was surprising was the lack of significance regarding the influence of the other variables on academic achievement, especially in light of the significant covariance between faith and the other factors. Three possible reasons for lack of significance include 1) low criterion reliability of scales, which would indicate that scales did not fully measure what they purported to measure. 2) No correlation was made between the evidence of assets and incidences of risk behavior involvement, whereas higher numbers of reported assets were equated with lower reports of risk behaviors, and increased incidences of academic success (Benson, 1990, 1997; Leffert et al., 1998). It would follow that high incidence of risk factors would decrease incidences of academic achievement. As the identified assets of this study were not compared against respective risk factors, incidences of academic achievement cannot be measured. 3) Structural equation modeling may not have provided the best statistical measurement of the relationships between assets and academic achievement, as path analysis predict causal relationships between independent and dependent variables, and the dependent variable might have been correlated to the independent variables but not a direct result of their influence. Rather, other statistical measures, such as correlations or regressions, might have provided statistically significant results regarding the strength of

relationships between academic achievement and the assets of kinship bonds, role adaptability, academic orientation, or work ethic.

Hypothesis 4: African American college students with strong faith, kinship bonds, role adaptability, academic orientation, and work ethic are more likely to reconstruct communities of support, thus increasing incidences of academic success.

The first indirect path hypothesized that students having strong faith, kinship bonds, role adaptability, academic orientation, and work ethic would be more likely to reconstruct a community of support to increase incidences of academic achievement. A reconstructed community of support was the name given to newly developed support systems intended to counteract the culturally congruent proximal support systems lost when Black student left home to reside at and attend a predominantly White university (Dornbusch, 2000). In this model, this newly developed support system consisted of school and community personnel whom students frequently consulted regarding their concerns.

Only faith and work ethic were found to have significant influence on the reconstructed community of support. Faith was found significant as faith-based leaders were considered part of the measurement of students' community of support. Along with religious beliefs and activities, faith-based leaders were also an important component in the measurement of religious involvement as an asset. Work ethic was significantly related to a reconstructed community of support based on students' campus work and its relation to interaction with peers

and faculty. Both peers and faculty were considered part of the reconstructed community of support.

The findings imply that students having strong faith and work ethic are more likely to reconstruct communities of support. However, this reconstructed school-based support system was not shown to significantly influence academic achievement. This lack of significance could be based on how students define their community of support, versus the measure used. Black students defined their community of support as consisting primarily of peers, whereas the reconstructed community of support consisted of school based personnel. As Black students were least likely to consult the latter group, no significant relation was found between support received from formal school personnel and academic achievement.

Hypothesis 5: The assets of role adaptability, academic orientation, and work ethic influence the academic relatedness of student employment and the number of hours worked, thus influencing academic achievement for African American college students.

The second indirect path hypothesized that role adaptability, academic orientation, and work ethic would influence the relatedness of student employment to the major field of study and the number of hours worked. These measures of quality and quantity of work would in turn influence academic achievement.

Only one hypothesized relationship was found significant. Role adaptability was found to have an inverse relationship to the number of hours

students worked. This could be interpreted to indicate that Black students work fewer hours as they become adjusted to and identified with their roles as college students. As adapted students, they are expected to have an increased sense of self-worth and esteem.

The path analysis run on the model also indicated a second significant causal relationship between the two intervening variables related to student employment. Student employment related to major was found to positively influence the number of hours students work. Therefore, students worked more hours if their job was related to their field of study. As noted in the work of Astin (1999) and Brawer (1996), increased hours of student employment decreased academic achievement, except when employment was related to students' field of study. Therefore, decreased hours worked as influenced by role adaptability and increased hours worked as influenced by employment related to major should have positively influenced academic achievement. Lack of significant findings could indicate that hours worked is not predictive of academic achievement.

Hypothesis 6: A strong work ethic encourages the number of hours students work and negatively affects academic achievement for African American college students.

To eliminate the possible effects of covarying factors, the third indirect path hypothesized that examining a strong work ethic alone would increase the number of hours students worked, thereby decreasing incidences of academic achievement. As findings in this study showed that students did not receive

financial support from their parents, it was believed that they would have a stronger inclination to work to support their education goals. Therefore an increased work ethic would lead students to work more hours, thus decreasing academic achievement (Astin ,1999; Brawer, 1996). Unfortunately, both the relationships between work ethic and hours worked and hours worked and academic achievement were found to be nonsignificant. Lack of significant findings again question whether hours worked was an accurate predictor of academic achievement.

Limitations

There were a number of limitations that were believed to influence the results of this study including the validity and reliability of the initial measure and developed model, the length of the MSUSAS, and the limits of the data and sample size.

Limits of the MSUSAS

The MSUSAS was a pilot survey designed to measure the assets of college students. At the time of this study, concepts measured by the MSUSAS had yet to be validated. Therefore data for this study was drawn from responses to the survey prior to psychometrics being completed. While findings from this study may assist with improving the MSUSAS, the lack of measure validity and reliability undermines the strength of the results. As a result, significant alphas could be attributed to an increased number of items entered into the equation rather than consistency within subject responses; and nonsignificant alphas could be attributed to greater variability among subjects or high random error.

Based on student feedback in the pilot study and written comments included on the completed surveys the MSUSAS was too long and required too much time to complete. There were 28 demographic items and 248 survey questions. Students reported taking an average of 40 minutes to complete this survey. Students providing feedback speculated that the length of the survey would discourage many students from completing it. To counteract the length and time required for completion cash incentives were offered at subsequent distributions of the survey.

Other limitations with the survey involve the types of questions included or excluded. Despite the number of questions included, there were none that addressed where students might go to access 'ethnic community'. Students may have reconstructed informal communities of support among ethnic community members who were not related to the school environment or not included on the survey. Future studies might include items that specifically examine ethnic community. Also, there was a lack of questions related to assessing cultural embeddedness or stage of cultural identity. As a result, the effect of cultural identity on developmental issues could not be measured. By including all Black students based on the 'one drop rule' there was no control for multiracial influences. Future studies might either control for ethnicity and/or measure cultural identity and cultural embeddedness. In addition, few questions addressed precollege attributes, therefore it was impossible to truly gauge students' prior entrenchment in ethnically congruent families or communities, or to measure the strength of their relationships with their parents. This was

important, as in the case of the latter concern strained relationships with parents prior to attending school may have affected the type of support received from parents and the frequency of communication with parents, as ties may have been diffuse. Notwithstanding these limitations, the demographics section provides ample potential for future exploration of identifying the student's permanent home environment and reasons for attending MSU. Inferences might be made from these findings about the strength of students relationship with parents.

Limits of the sample size

Despite the African American student response rate of 12.5%, which over-represented the number of Blacks in the student body (8.2%), the resulting N of 173 was shown to have low power to generalize findings to the population. Significant reliability would require either an increased number of student responses or increased degrees of freedom.

Also, the range of students based on academic standing provided for a variance in development and school related experiences. For instance, as freshmen were still fairly new to campus they may have had few opportunities to interact with MSU personnel and East Lansing community members or to access various school-based resources. Therefore, their responses were more prone to indicate less frequent contact. On the other hand, upperclassmen were more likely to live off-campus and to work. They may have skewed responses showing lack of participation in on-campus related activities, but more interaction with MSU personnel and East Lansing community members.

Limits of the developed model

There were also limitations regarding the development and use of the five strengths as a model for assets assessment. Assets used to define the five strengths may not have fully measured the aspects of faith, kinship bonds, role adaptability, academic orientation, and work ethic. In the same vein, items used to measure student employment related to major and academic achievement may not have been valid. As the five factors were based on research specific to family systems they may not have been truly applicable to individuals. Also based on Billingsley's (1992) and Hill's (1999) theories, examination of individual strengths using the family strengths model may have been more appropriate for younger students and individuals who reside in the home where family is proximal.

In addition, the measurements of student employment related to major and academic achievement may not have been adequate. The two items used to measure students' employment related to major asked if employment during school year or employment during summer was related to major. No consideration was given for students who had yet to commit to a major or did not work at all. Also no consideration was given to student's involved in nonpaid "work " positions, such as major related internships or volunteer commitments. Therefore all 'no' responses appeared to indicate students' employment was not related to major.

Grade point average was the only measure of academic achievement used to assess educational success. Not accounted for was steady progress

made towards completing degree requirements, grade point average in major field of study versus college required courses and electives, or students' actual level of ability. Cokley (2000) notes that grade point average is used to indicate academic achievement of Black students attending predominantly White universities, whereas student's interactions with faculty is a better indicator for Black students attending historically Black colleges and universities. Maton and Hrabowski (1995) note that academic achievement should be a balanced assessment of grade point average, social involvement, interactions with the school, and support received from the school.

Lastly, the path analysis calculations resulted in low degrees of freedom, which when paired with the sample size of 173 produced low power estimates. Power estimates the reliability of the results being obtained with a different sample group or being generalized to the population. In essence low power means low reliability.

Implications

Research

Current data. Once the psychometrics are completed on the MSUSAS, and the survey validated, the data should be revisited. New exploratory factor analyses should be run on the responses of Black and White students and compared to assess cultural influences on assets. If the survey is not shortened, an ethnically specific abbreviated version could be developed for use with Black students. This culturally appropriate abbreviated survey could then be compared to the other models designed to evaluate cultural assets (Lucero, 2000).

Efforts should be made to recruit more Black students, especially males, to complete the validated MSUSAS or culturally abbreviated survey. An increased ratio of male respondents approaching a more representative sample of the student body would provide for increased generalizability of findings and examination of gender differences in assets. Also controlling responses for class standing would provide examination of developmental issues and experiences affecting assets. The latter could be expanded to longitudinal research by retesting freshmen students in subsequent years.

Various studies could be conducted which control for high grade point averages, declaration of major, or minimum completion of credits. Responses focused on students with grade point averages of 3.0 or better might be a better indicator of relationships between grade point average and assets. Students who have declared their major of study would be assumed to be more committed to academic achievement. Students completing a minimum number of credits have made progress towards achieving their degree.

Other studies could also control for residence. MSU and other large predominantly White institutions, have a number of experimental residential programs focused on academic majors, technology, multiracial inclusion, and others. Residence halls also have Black Caucuses, student organizations intended to support and provide unity to Black students residing in the dorms. Examining the community assets provided by these caucuses or residential programs would shed light on their impact on positive experience and characteristics associated with assets.

Once responses are reexamined, necessary changes must also be made to the scales of the ethnically appropriate model. Items deleted from or added to the survey might also be deleted from or added to the model. Alpha scores should be recalculated with efforts made to improve statistical significance to .70 or greater. Increasing the reliability of the model and the sample size will also improve the power estimate of the model. Also, more appropriate measures of reconstructed community of support, student employment related to major and academic achievement might be devised. The reconstructed communities of support measure would incorporate questions specific to people and places students' perceive as providing ethnic community. This might include membership in ethnic based student groups (e.g. Black Student Association, Minority Aides, or Black Caucus). Findings would prove instrumental to policies and support of programs developed to provide supportive services and environments. Changes made to the student employment related to major measure would tease out students who do not work and would include items accounting for student involvement in non-paid internships or volunteer work related to major. The purpose of this measure would be to assess students' level of commitment to and engagement with their field of study. Academic achievement would add to grade point average measures indicative of retention (i.e. engagement with faculty, prosocial school climate), progress made, and commitment to completion of degree requirements.

In addition, responses related to assets might be examined alongside the responses regarding risk involvement. This could be done to determine if

increased assets correlate to decreased risk behaviors and increased academic achievement.

Follow-up studies. Follow-up research would include longitudinal, gender based, and cultural identity based studies, and examination of troubling or curious findings. Longitudinal studies based on class standing could provide examination of precollege assets as well as the influences of the college setting on assets. Gender based studies could examine the assets most specific to males and females. Studies, which combine cultural identity measures, could further explore the influence of ethnicity on assets. Findings, such as those indicating the frequency of contact between Black students and police might be explored to understand the reasons for this phenomenon.

Also, comparative studies might be conducted to further explore developmental and ecological issues. Studies of students attending historically Black colleges and universities might be examined against Black students attending a predominantly White institution, for the purpose of examining the role of the racial setting as an influence of assets provided to Black college students. Also students attending small private colleges, or community colleges could be compared against those attending a large public research-based university. This study would provide for examination of the school's size and educational focus and setting as characteristics of the proximal systems influencing assets provided to Black students.

In addition, focus could be placed on student's residence and involvement in resident-based programs to examine the influence of assets provided by the

external factors related to type of habitation. An example would be to compare the external providers of assets, as well as the assets provided to college students commuting from family home to school versus those residing on campus. Another example would be to focus on the community provided by school-designed residential programs. MSU has a number of such programs, some of which place same major students (e.g. residential programs for engineering students) in a single housing structure for the purpose of facilitating shared resources and social networks based on the attainment of common goals. Others focus on social issues, such as one residential program that places multiracial students together (MRULE – Multi Racial Unity Living Experience) for the purpose of facilitating racial diversity and promoting cross-cultural understanding. Both types of programs could be examined regarded their influence on the assets provided to the student residents.

Developmentally, the cultural model could be adapted for use with Black youth ages 12 to 17 years to examine the assets provided primarily by family, school, and community. This latter model would provide culturally influenced data for comparison with the youth assets findings discussed by Leffert et al (1998) and Lucero (2000).

Practice

What could MSU faculty, staff, and support services do with these findings to enhance what they do? As part of student's school based microsystem, faculty, staff, and support services are expected to provide external assets to college students. Only one asset category was found significantly predictive of

academic achievement, and it comprised only one external asset - religious importance. Few academically based support services are expected to address religious concepts. However, some institutions of higher education recognize the importance of religion for students and faculty and thus provide shared spaces for use by community religious organizations. These strategic partnerships, which provide students with access to external networks, might be explored for their influence on academic achievement. In addition, other aspects of faith, which might be supported by school personnel, could be further examined for their influence on the development of internal characteristics shown to influence the retention and achievement of Black students (Taylor & Olswang, 1997). These characteristics include the asset categories of social competence, positive values, and positive identity. Taylor and Olswang (1997) note that social relations between school personnel and peers undergird these interpersonal characteristics or internal assets, and therefore efforts should be made to encourage and support social interactions between students and faculty.

Overall, the assets of Black students were found to emphasize personal characteristics, relationships with peers, social interactions with peers and faculty, and the psychosocial aspects of the learning climate. Efforts to either continue or adapt strategies to support these assets might be adopted. Students could be encouraged to visit with faculty to discuss progress. This also provides faculty the opportunity to exhibit concern and acceptance. In addition, teaching strategies could include group discussions and projects, which emphasize the asset of group orientation.

Policy

What do the findings mean for predominantly White institutions? Specifically, only the asset category of faith was found significantly related to academic achievement. Varying areas of policies can be encouraged to support these findings for the purpose of influencing students' academic achievement. For one, strategic partnerships with faith-based community organizations might be encouraged to provide external networks for students. For another, policies can be encouraged to accept students' beliefs and religious practices. However, it should be noted that faith is not provided by or necessarily influenced by the academic institution.

Overall, the predominantly White institution of the study was found to provide similar assets to both the Black and White students. However, students' perceptions of the importance of the individual assets related to their academic success differed along cultural lines. Black students placed primary emphasis on interpersonal relationships, the psychosocial climate, and feeling welcomed and accepted by the community. Less emphasis was placed on factors directly related to academics, such as physical educational resources. Patterson-Stewart, Ritchie, and Sanders (1997) note that these interpersonal characteristics of feelings, attitudes, perceptions, and peer group relations factor significantly in the retention and matriculation of Black students. Therefore it is suggested that policies specific to Black students focus on becoming cognizant of Black students' feelings and perceptions of the school climate, and then work towards creating environments that are psychosocially welcoming and supportive

of Black students. The academic learning atmosphere, or psychosocial school climate (Cabrera et al., 1999; Davis, 1998), is based on the attitudes and behaviors of personnel in regards to Black students and is noted as being key to their retention and graduation. Policies that support a prosocial climate encourage the acceptance of students, listening to their concerns, and addressing their needs. This may result in students feeling empowered, which may subsequently lead to a decrease in attrition. Once a feeling of security is established, students can better focus on academic pursuits.

Mutual engagement between, students, faculty, and community is key to sustaining institutions' relationships with the community and with students (Cokley, 2000; Kellogg Commission, 1999). Policies should be developed, expanded, and implemented that encourage sustained undergraduate academic and social engagement between faculty and students. For example, Black students could be invited to assist with and contribute to faculty's research, to join major-related professional and school-based organizations, and to attend conferences with faculty. Mentor programs between staff and students could also be encouraged. As noted earlier, increased frequency of contact, and perceptions of being welcomed by community personnel was equated with students feeling accepted and empowered, thus encouraging academic retention that may lead to academic attainment.

An additional finding must also be addressed for its implications for policy. While the relationship to academic achievement was non-significant, findings from this study showed employment related to student's major increased the

number of hours students worked. Bracey (1998) and Pascarella et al (1998) note that student employment may have a positive influence on students' academic learning if related to school and not more than 20 hours per week. Academic progress was found negatively influenced when either part-time employment on-campus exceeded 15 hours per week or off-campus employment exceeded 20 hours per week. This inverse relationship was also found to correlate with students' advanced status. In other words, the more hours upper classmen worked, the poorer their grades and less likely their matriculation in four years. Internships, major-related work opportunities, were found to have more positive effects on improving college performance and increasing post-college job opportunities (Knouse, Tanner, & Harris, 1999). Therefore, policies could be expanded or developed which address the number of hours students are eligible to be employed and maintain full-time student status. In addition, efforts should be made to increase internship opportunities. The number of hours students are eligible to be employed should be designed to decrease with students' advancing status, and correspondingly internship expectations and opportunities should increase. In addition, financial packages, which emphasize academic progress rather than work-study commitments, might be made more readily available to upperclassmen. As a result, Black students are encouraged to prioritize and complete their academic pursuits; are provided opportunities to gain apprentice experience in their field of study; and are granted more time to engage and network with social entities found to positively influence academic achievement.

REFERENCES

Arbuckle, J. L. (1997) Amos 4.0 software. Chicago, IL: SmallWaters Corporation.

Allen, W. R. (1985). Black student, White campus: Structural, interpersonal, and psychological correlates of success. Journal of Negro Education, 54(2), 134-147.

Allen, W. R. (1992). The color of success: African-American college student outcomes at predominantly White and historically Black public colleges and universities. Harvard Educational Review, 62(1), 26-44.

Allen, W. R., Epps, E. G., & Haniff, N. Z. (1991). College in Black and White: African American students in predominantly White and in historically Black public universities. Albany, NY: State University of New York.

Alston, R. J., & Turner, W. L. (1994). A family strengths model of adjustment to disability for African American clients. Journal of Counseling and Development, 72(4), 378.

Astin, A. W. (1999). Student involvement: a developmental theory for higher education. Journal of College Student Development, 40(5), 518-529.

Baldwin, J. A., & Hopkins, R. (1990). African-American and European-American cultural differences as assessed by the worldviews paradigm: An empirical analysis. Western Journal of Black Studies, 14(1), 38-52.

Barker, N. C., & Hill, J. (1996). Restructuring African American families in the 1990's. Journal of Black Studies, 27(1), 77-93.

Barras, J. R.(2000). Whatever happened to daddy's little girl? The impact of fatherlessness on Black women. New York: The Ballantine Publishing Group.

Benson, P. L. (1990). The troubled journey: A portrait of 6th-12th grade youth. Minneapolis, MN: Search Institute.

Benson, P. L. (1997). All kids are our kids: What communities must do to raise caring and responsible children and adolescents (1997 ed.). San Francisco, CA: Jossey-Bass Inc., Publishers.

Benson, P. L., & Donahue, M. J. (1989). Ten-year trends in at-risk behavior: A national study of Black adolescents. Journal of Adoloescent Research, 4(2), 125-139.

Benson, P. L., Galbraith, J., & Espeland, P. (1998). What kids need to succeed. Minneapolis, MN: Free Spirit Publishing.

Berkow, D. N., Richmond, B., & Page, R. C. (1994). A cross-cultural comparison of worldviews: American and Fijian counseling students. Counseling and Values, 38(2), 121-135.

Billingsley, A. (1992). Climbing Jacob's ladder: The enduring legacy of African-American families. New York: Touchstone.

Blyth, D. A. (1993). Healthy communities; Healthy youth: How communities contribute to positive youth development. Minneapolis, MN: Search Institute.

Bocknek, G. (1980). The young adult: Development after adolescence. Belmont, CA: Brooks/Cole Publishing Co.

Bollen, K. A. (1989). Structural equations with latent variables. New York, NY: John Wiley and Sons.

Boykin, A. W. (1991). Black psychology and experimental psychology: A functional confluence. In R. L. Jones (Ed.) Black Psychology (third ed.) (pp. 481-507). Berkeley, CA: Cobb and Henry Publishers.

Bracey, G. W. (1998). Working in college: Outcomes similar to high school. Phi Delta Kappan, 80(2), 170.

Brawer, F. B. (1996). Retention-attrition in the nineties (ERIC Digest ED393510). Los Angeles, CA: ERIC Clearinghouse for Community Colleges.

Bronfenbrenner, U. (1979). The ecology of human development: experiments by nature and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1988). Interacting systems in human development. Research paradigms: Present and future. In N. Bolder, A. Caspi, G. Downey, & M. Moorehouse (Eds.), Persons in context: Developmental processes (pp. 25-49). Cambridge: Cambridge University Press.

Brook, J. S., Balka, E. B., Brook, D. W., Win, P. T., & Gursen, M. D. (1998). Drug use among African Americans: ethnic identity as a protective factor. Psychological Reports, (83), 1427-1146.

Bubolz, M. M., & Sontag, M. S. (1993). Human ecology theory. In P. G. Boss & W. J. Doherty & R. LaRosa & W. R. Schumm & S. K. Steinmetz (Eds.), Sourcebook of Family Theories and Methods (pp. 419-447). New York: Plenum Press.

Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: a comparison between White students and African American students. The Journal of Higher Education, 70(2), 134-160.

Chavous, T. M. (2000). The relationships among racial identity, perceived ethnic fit, and organizational invovlement for African American students at a predominantly white university. Journal of Black Psychology, 26(1), 79-100.

Cokley, K. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American college students. Journal of Black Psychology, 26(2), 148-164.

Coleman, J.S. (1994) Social capital, human capital, and investment in youth. In A. C. Peterson & J. T. Mortimer (Eds.) Youth unemployment and society. (pp. 34-50). New York: Cambridge University Press.

Cooke, P. A., Klopf, D. W., & Ishii, S. (1991). Perceptions of world view among Japanese and American university students: A cross-cultural comparison. Communication Research Reports, 8(1-2), 81-88.

Cose, E. (1998). Living with the tests: Why do certain black students succeed? Newsweek, September 14, 65.

Crano, W. D.& Mendoza, J. L. (1987) Maternal factors that influence children's positive behavior: Demonstration of a structural equation analysis of selected data from the Berkeley Growth Study. Child Development, 58, 38-48.

Davis, J. E. (1998). Campus climate, gender, and achievement of African American college students. African American Research Perspectives, 4(1), 40-46.

Deater-Deckard, K., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1998). Multiple risk factors in the development of externalizing behavior problems: Group and individual differences. Development and Psychopathology, 10(3), 469-493.

Delicio, G. (1993). Dimensions of success as identified by high-achieving, Black, pre-college students. Paper presented at the 18th National Conference on Blacks in Higher Education, Washington, DC, April 3.

Dornbusch, S. M. (2000). Transitions from adolescence: A discussion of seven articles. Journal of Adolescent Research, 15(1), 173-177.

English, M. A. (1992). Retention of minority (Black) students on predominantly White college and university campuses. Dissertation Abstracts International, 52, 2713-2714.

Erikson, E. H. (1993) Childhood and society. New York: W. W. Norton and Company, Inc.

Fassinger, R. E., & Richie, B. S. (1994). Being the best: Preliminary results from a national study of the achievement of prominant Black and White women. Journal of Counseling Psychology, 41(2), 191-204.

Feagin, J. R., Vera, H., & Imani, N. (1996). The agony of education: Black students at White colleges and universities. New York: Routledge.

Fink, A. (1995). How to report on surveys (vol. 9). Thousand Oaks, CA: Sage Publications.

Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the "burden of 'acting White'". The Urban Review, 18(3), 176-206.

Gibbs, J. T. (1998). High-risk behaviors in African American youth: conceptual and methodological issues in research. In V. C. McCloyd & L. Steinberg (Eds.), Studying minority adolescents: conceptual, methodological, and theoretical issues (pp.55-86). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Gilchrest, G. G. (1994) Racial identity and cultural worldviews among ethnically diverse White college students: a quantitative and qualitative analysis. Dissertation Abstracts International Section A: Humanities and Social Sciences, 54, 2894.

Guerra, N. G., & Jagers, R. (1998). The importance of culture in the assessment of children and youth. In V. C. McLoyd & L. Steinberg (Eds.), Studying minority adolescents: conceptual, methodological, and theoretical issues (pp. 167-181). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Hardy, K., & Treadwell, M. (1999). Minority populations growing at steady rate. Michigan State University, State News, September 16, pp. A1, A2.

Harrison, A. O., Wilson, M. N., Pine, C. J., Chan, S. Q., & Buriel, R. (1990). Family Ecologies of Ethnic Minority Children. Child Development, 61, 347-362.

Harrison, S. (2000). Study says campus diversity to bloom. Michigan State University, State News, pp. A1, A2.

Hatter, D. Y. & Ottens, A. J. (1998). Afrocentric world view and Black students' adjustment to a predominantly White university: Does worldview matter? College Student Journal, 32(3), 472-480.

Hayles Jr., V. R. (1991) African American strengths: A survey of empirical findings. In R. L. Jones (Ed.) Black psychology (3rd ed.), pp. 379-400. Berkeley, CA: Cobb and Henry Publishers.

Heath, T. (1992). Predicting the educational aspirations and graduate plans of Black and White college and university students: When do dreams become reality. Minneapolis, MN: Association for the Study of Higher Education.

Heisler, B. (2001). The 'one drop' rule. The Washington Post, April 30, A16.

Higgins, R. D. (1994). The Black student's guide to college success. Westport, CT: Greenwood Press.

Hill, R. B. (1999). The strengths of African American families: Twenty-five years later. Lanham, MD: University Press of America, Inc.

Hines, P. M., & Boyd-Franklin, N. (1982). Black families. In M. McGoldrick & J. K. Pearce & J. Giordano (Eds.), Ethnicity and family therapy (pp. 84-107). New York: The Guilford Press.

Hudgins, J. L. (1992). The strengths of Black families revisited. Urban League Review, 15(2), 9-20.

Jackson, M. A., & Malott, R. W. (1994). Helping high-risk black college students. In R. Gardner III, D. M. Sainato, J. O. Cooper, T. E. Heron, W. L. Heward, J. W. Eshleman, and T. A. Grossi, (Eds.) Behavior analysis in education: Focus on measurably superior instruction (pp.349-363). Pacific Grove, CA: Brooks/Cole Publishing Co.

Jackson, N., Johnson, S. & Bell, M. (1996). Successful Community College Recruitment & Retention: Case Studies. Paper presented at the Annual Meeting of Association of Teacher Educators, St. Louis, MO, February 26.

Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. American Psychologist, 48(2), 117-126.

Jessor, R., Donovan,J.E., & Costa, F. M. (1994). Beyond adolescence: Problem behavior and young adult development. Cambridge: Cambridge University Press.

Keith, J., Villarruel, F., Gardner, P., Lumpkin, C., & Daenzer, D. (1999). Michigan State University Student Assets Survey. East Lansing, MI: Michigan State University.

Keith, J. G., & Perkins, D. F. (1995). 13,000 Adolescents Speak: A Profile of Michigan Youth (Project Report). East Lansing, MI: Institute for Children, Youth and Families, Michigan State University.

Kellogg Commission on the Future of State and Land-Grant Universities. (1999) Returning to our roots: The engaged institution (3rd report). Washington, DC: National Association of State Universities and Land-Grant Colleges.

Knight, G. P., & Hill, N. E. (1998). Measurement equivalence in research involving minority adolescents. In V. C. McLoyd & L. Steinberg (Eds.), Studying minority adolescents: conceptual, methodological, and theoretical issues (pp. 183-210). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Knouse, S. B., Tanner, J. R., & Harris, E. W. (1999). The relation of college internships, college performance, and subsequent job opportunity. Journal of Employment Counseling, 36(1), 35-43.

Kobrak, P. (1992). Black student retention in predominantly White regional universities: The politics of faculty involvement. Journal of Negro Education, 61(4), 509-530.

Kunjufu, J. (1986). Motivating and preparing Black youth for success. Chicago, IL: African American Images.

Lang, M. & Ford, C. A. (1988). Black Student Retention in Higher Education. Springfield, IL: Charles C. Thomas, Publisher.

Leffert, N., Benson, P. L., & Roehlkepartain, J. L. (1997). Starting out right: Developmental assets for children. Minneapolis, MN: Search Institute.

Leffert, N., Benson, P. L., Scales, P. C., Sharma, A. R., Drake, D. R., & Blyth, D. A. (1998). Developmental assets: Measurement and prediction of risk behaviors among adolescents. Applied Developmental Science, 2(4), 209-230.

Lerner, R. M. & Tubman, J. G. (1991) Developmental contextualism and the study of early adolescent development. In R. Cohen and A. W. Siegel (Eds.) Context and development (pp. 183-210). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Lucero, M. G. (2000). The spirit of culture: applying cultural competency to strength based youth development. Denver, CO: Assets for Colorado Youth.

MacCullum, R. C., Browne, M. W., & Sugawara, H. M. (1996) Power analysis and determination of sample size for covariance structure modeling. Psychological Methods, 1(2), 130-149.

Maton, K. L. & Hrabowski, F. A. (1995). Enhancing the success of African American students in the sciences: freshmen year outcomes. In I. Westat (Ed.), Innovating and Evaluating Science Education: NSF Evaluation Forums 1992-94, 11 pages. A report retrieved August 8, 2000 from the World Wide Web: http://www.her.nsf.gov/HER/REC/pubs/NSF_EF/start.htm.

Mattis, J. S., Taylor, R. J., & Chatters, L. M. (2001). Are they truly not religious? A multi-method analysis of the attitudes of religiously noninvolved African American women. African American Research Perspectives, 7(1), 90-103.

McAdams, D. P., Booth, L., & Selvik, R. (1981). Religious identity among students at a private college: social motives, ego stage, and development. Merrill-Palmer Quarterly, 27(3), 219-239.

McCabe, K. & Banett, D. (2000). First comes work, then comes marriage: Future orientation among African American young adults. Family Relations, 49(1), 63-70.

McCloyd, V. C. (1999). Conceptual and methodological issues in the study of ethnic minority children and adolescents. In H. E. Fitzerald & B. M. Lester & B. S. Zuckerman (Eds.), Children of color: research, health, and policy issues (pp. 3-24). New York: Garland Publishing, Inc.

McCloyd, V. C., & Steinberg, L. (Eds.). (1998). Studying minority adolescents: conceptual, methodological, and theoretical issues. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

McCray, W. A. (1992). Black young adults: How to reach them, what to teach them. Chicago: Black Light Fellowship.

McCubbin, H. I., Thompson, E. A., Thompson, A. I., & Futrell, J. A. (Eds.). (1998). Resiliency in African-American families. Thousand Oaks, CA: Sage Publications.

Moffatt, M. (1991) College life: Undergraduate culture and higher education. Journal of Higher Education, 62(1), 44-61.

More bad news on Black graduation rates. (1996/97). The Journal of Blacks in Higher Education, 14, 56-57.

Michigan State University Women's Resource Center (1999) Annual descriptive narrative report on affirmative action and diversity for the period October 1, 1997 to September 30, 1998. East Lansing, MI: Michigan State University.

Murry, V. M., & Brody, G. H. (1999). Self-regulation and self-worth of Black children reared in economically stressed, rural, single mother-headed families: The contribution of risk and protective factors. Journal of Family Issues, 20(4), 458-484.

Muus, R. E. (1996). Theories of adolescence (6th ed.). New York: McGraw-Hill Companies, Inc.

Nettles, S. M. (1991). Community contributions to school outcomes of African-American students. Education and Urban Society, 24(1, November), 132-147.

Nichols, E. (1976) The philosophical aspects of cultural differences. Paper presented at the Institute of Education, University of Ibadan, Nigeria.

Nemeth, C. J., & Kwan, J. L. (1985). Originality of word associations as a function of majority vs. minority influence. Social Psychology Quarterly, 48(3), 277-282.

Nsameng, A. B. (1993). The ecology of child development: research considerations. Journal of Psychology in Africa, 1(5), 81-89.

Ogbu, J. U. (1981). Black Education: A cultural-ecological perspective. In H. P. McAdoo (Ed.), Black Families (1st ed., pp. 169-184). Thousand Oaks, CA: Sage Publications, Inc.

Ogbu, J. U. (1992). Understanding cultural diversity and learning. Educational Researcher, 21(8), 5-14.

Pascarella, E., Edison, M., Nora, A., Hagedorn, L. S., & Terenzini, P. (1996). Additional evidence on the cognitive effects of college racial composition: A research note. Journal of College Student Development, 37(5), 494-501.

Pascarella, E. T., Edison, M. I., Nora, A., Hagedorn, L. S., & Terenzini, P. T. (1998). Does work inhibit cognitive development during college? Educational Evaluation and Policy Analysis, 20(2), 75-93.

Patterson-Stewart, K. E., Ritchie, M. H., & Sanders, E. T. W. (1997). Interpersonal dynamics of African American persistence in doctoral programs at predominantly White universities. Journal of College Student Development, 38(5), 489-498.

Piotrowski, C., & Perdue, B. (1998). Factors in attrition of Black students at a predominantly Euro-American university. Psychological Reports, 83(1), 113-114.

Pratt, M. W. (2000). The transition to university: Contexts, connections, and consequences. Journal of Adolescent Research, 15(1), 5-8.

Pruett, K. D. (2000). Fatherneed: Why father care is essential as mother care for your child. New York: The Free Press.

Roehlkepartain, J. L. & Leffert, N. (2000). What young people need to succeed: Working together to build assets from birth to age 11. Minneapolis, MN: free Spirit Publishing.

Rogers, D. (1972). The psychology of adolescence (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Rowser, J.F. (1990). A retention model for African American students. Western Journal of Black Studies, 14(3), 166-170.

Ryan, R. M., & Lynch, J. H. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. Child Development, 60, 340-356.

Sailes, G. A. (1993). An investigation of Black student attrition at a large, predominately White, midwestern university. Western Journal of Black Studies, 17(4), 179-182.

Scales, P. C., & Leffert, N. (1999). Developmental assets: A synthesis of the scientific research on adolescent development. Minneapolis, MN: Search Institute.

Schmidt, J. A., & Hunt, P. F. (1994). Relationship between precollege attributes and subsequent development in college students. Journal of College Student development, 35, 481-485.

Sedlacek, W.E. (1987). Black students on White campuses: 20 years of research. Journal of College Student Personnel, 28(6), 484-495.

Sherman, T. M., Giles, M.-B., & Williams-Green, J. (1994). Assessment and retention of Black students in higher education. Journal of Negro Education, 63(2), 164-180.

Sodowsky, G. R., Maguire, K., Johnson, P., Ngumba, W., & Kohles, R. I. (1994). World views of White American, mainland Chinese, Taiwanese, and

African students: An investigation into between-group differences. Journal of Cross Cultural Psychology, 25(3), 309-324.

Sowa, C. J., Thomson, M. M., & Bennett, C. T. (1989). Prediction and improvement of academic performance for high-risk Black college students. Journal of Multicultural Counseling and Development, 17(1), 14-22.

Stamps, D. B. (1988). Coping ability as a predictor of academic achievement among selected Black college students: A case study. In M. Lang and C. A. Ford (Eds.) Black student retention in higher education (pp. 83-92). Springfield, IL: Charles C. Thomas, Publisher.

Steele, C. M. (1992). Race and the schooling of Black Americans. Atlantic Monthly, 269(4), 68-78.

Steinberg, L., & Fletcher, A. C. (1998). Data analytic strategies in research on ethnic minority youth. In V. C. McLoyd & L. Steinberg (Eds.), Studying minority adolescents: conceptual, methodological, and theoretical issues (pp. 279-294). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Stevenson, H. C. (1998) Raising safe villages: Cultural-ecological factors that influence the emotional adjustment of adolescents. Journal of Black Psychology, 24(1), 44-59.

Steward, R. J., & Jo, H. (1998). Does spirituality influence academic achievement and psychological adjustment of African American urban adolescents? East Lansing, MI: Michigan State University.

Sugland, B. (1993) Social capital and the successful transition to adulthood among "at risk" young women. Washington, DC: Child Trends, Inc.

Super, C. M., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of child and culture. International Journal of Behavioral Development, 9, 545-569.

Sussman, N. M. (2000). The dynamic nature of cultural identity throughout cultural transitions: Why home is not so sweet. Personality and Social Psycholological Review, 4(4), 355-373.

Swanson, D. P. & Spencer, M. B. (1991) Youth policy, poverty, and African Americans: Implications for resilience. Education and Urban Society, 24(1), 148-161.

Tatum, B. D. (1997). "Why are all the Black kids sitting together in the cafeteria?" And other conversations about race. New York: Basic Books.

Taylor, E. D. (2000) Peer support and the academic outcomes of African American adolescents: a review. African American Research Perspectives, 6(2), 25-34.

Taylor, E. & Olswang, S. G. (1997). Crossing the color line: African Americans and predominantly White universities. College Student Journal, 31, 11-18.

Terenzini, P. T. (1987). A review of selected theoretical models of student development and collegiate impact. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Baltimore, MD.

Terenzini, P. T. & Pascarella, E. T. (1994). Living wing with the myths: Undergraduate education in America. Change, 26(1), 28.

Thomas, R. M. (2000). Comparing theories of child development. Belmont, CA: Wadsworth Publishing Company.

Tubbs, C. Y. & Boss, P. (2000) An essay for practitioners: Dealing with ambiguous loss. Family Relations, 49(3), 285-286.

Valenzuela, A. & Dornbusch, S. M. (1994). Familism and social capital in the academic achievement of Mexican origin and Anglo adolescents. Social Science Quarterly, 75(1), 18-36.

Webley, P., & Lea, S. (1997, February 21). PSY 6003 Advanced statistics - Multivariate analysis II: Manifest variables analyses, Topic 3: path analysis, [web page]. University of Exeter Department of Psychology. Available: http://www.exeter.ac.uk/~SEGLea/multvar2/pathanal.html [2000, Dec 4].

Wicklin, J. V. (1997, January). Collaborative assessment project: Developmental perspectives for young adults, [web site]. Council for Christian Colleges and Universities. Available: http://64.224.113.246/projects/assessment/csdoph.htm [9/26/2000].

Wilds, D. J. (2000). Seventeenth annual status report on minorities in higher education 1999-2000. Washington, DC: American Council on Education.

Wiley, E., III. (1989). Mentor programs successful in minority retention. Black issues in higher education, 5(22), 8.

Wilson, L. L., & Stith, S. M. (1993). The voices of African-American MFT students: Suggestions for improving recruitment and retention. Journal of Marital and Family Therapy, 19(1), 17-30.

Wright, L. (1994). "One drop of blood". The New Yorker, July 24. Available online: http://www.afn.org/~dks/race/wright.html.

APPENDIX A

Michigan State University Student Assets Survey (MSUSAS)

Personal Demographics: This section collects socio-economic information regarding the development of different profiles of students. All information is aggregated and no individual can be identified through the information provided.

Birthdate: month /day/year _____/_____/_____ **Gender:** ☐ Female ☐Male

What is your class standing?: ☐ Freshman ☐ Sophomore ☐ Junior ☐ Senior

How many total MSU credits do you have? _____ **How many credits are you taking this semester?**_____

What is your Academic Major? _____

What is your cumulative Grade Point Average? _____

Do you have a Faculty Advisor? ☐ **Yes** ☐ **No**

Your Ethnicity (please indicate all that apply):

- ❑ African American or Black
- ❑ Asian-American
- ❑ Caucasian or White
- ❑ Indian-American (India/Indian subcontinent ancestry)
- ❑ Latino, Hispanic or Chicano
- ❑ Native American or Alaskan Native
- ❑ Middle Eastern American or Arab American
- ❑ Polynesian or Pacific Islander
- ❑ International Student (Nationality: _____)
- ❑ Other: _____

Did you live in the residence hall last year while attending MSU?

❑ Yes ❑ No

Residence hall -Name

_____

What city do you reside in while attending MSU?

- ❑ **East Lansing**
- ❑ **Lansing**
- ❑ **Haslett**
- ❑ **Holt**
- ❑ **Okemos**
- ❑ **Other** _____

Where are you living this year while attending MSU?

- ❑ Residence hall- Name _____
- ❑ University housing – apartments
- ❑ Fraternity/Sorority house
- ❑ House alone or with group of students
- ❑ Off-campus apartment
- ❑ At parent's/legal guardian's home

Who do you live with this year while attending MSU?

- ❑ I live alone
- ❑ 1-3 roommates
- ❑ 4 or more roommates
- ❑ Cohabit with partner
- ❑ Legal spouse (no children)
- ❑ Spouse and children
- ❑ Child or children (no spouse)
- ❑ Parents or legal guardians
- ❑ With relatives other than parents

Are your parents/guardians: (check one)

- ❑ Married and living together
- ❑ Divorced
- ❑ Separated
- ❑ Never married and living together
- ❑ Never married and not living together
- ❑ One parent is deceased
- ❑ Both parents are deceased

Who do you regularly live with when school is not in session? Check all that apply

- ❑ Birth mother
- ❑ Stepmother
- ❑ Adoptive mother
- ❑ Foster mother
- ❑ Birth father
- ❑ Stepfather
- ❑ Adoptive father
- ❑ Foster father
- ❑ Guardian
- ❑ Grandparents
- ❑ Siblings
- ❑ Other relatives
- ❑ Persons not related to me by blood
- ❑ Alone
- ❑ Spouse and/or children

Do you have children?

☐ Yes. How many? _____ ☐ No

Birth Order: What is your birth order?

❑ Oldest ❑ Youngest
❑ Middle ❑ Only

How many siblings do you have?

_____Sisters _____Brothers

How much education has your father completed?

❑ Less than high school
❑ High school
❑ Some college
❑ Completed a 2 year degree
❑ Completed a 4 year degree (BA or BS)
❑ Completed some graduate school for Masters or Ph.D.
❑ Completed a graduate degree (Masters or Ph.D.)
❑ Specialized degree

How much education has your mother completed?

❑ Less than high school
❑ High school
❑ Some college
❑ Completed a 2 year degree
❑ Completed a 4 year degree (BA or BS)
❑ Completed some graduate school for Masters or Ph.D.
❑ Completed a graduate degree (Masters or Ph.D.)
❑ Specialized degree

Where is your permanent home? (City, State or Province, Country)

_____

In which environment did you primarily spend your childhood?

❑ Urban – large city population > 100,000
❑ Suburban or city of 25,000 to 100,000
❑ Small town of 2500 to 25,000
❑ Rural or town of < 2500

Do you consider your family to be?

❑ Very Poor ❑ Poor ❑ Middle class ❑ Upper middle class ❑ Wealthy

How many students attended your high school?

❑ Home schooled ❑ Less than 100 ❑ 101- 250 ❑ 251-500
❑ 501-750 ❑ 751-1000 ❑ 1001 - 1500 ❑ 1501or more

How culturally diverse was your high school?

❑ Not diverse at all ❑ Somewhat diverse ❑ Moderately diverse ❑ Considerably Diverse ❑ Extremely diverse

Do you have any of the following currently attending MSU? Check all that apply:

❑ Brother ❑ Mother ❑ Spouse ❑ Other relative
❑ Sister ❑ Father ❑ Cousin ❑ No relatives currently attend

What types of financial assistance have you received to enable you to attend MSU? Check all that apply

❑ Academic Scholarship(s)
❑ Athletic Scholarship(s)
❑ Pell Grant
❑ State loans/scholarships
❑ Work Study
❑ Federally Subsidized/Unsubsidized Loan(s)
❑ Other Scholarships, Grants or Awards
❑ None

Why did you choose to attend MSU? Check all that apply.

❑ Academic scholarship or grant
❑ Athletic scholarship or grant
❑ Campus is close to home
❑ Campus is far from home
❑ Cost of tuition
❑ Parents attended
❑ Relatives attended or currently attend
❑ Scholarly reputation
❑ Reputation of athletic teams
❑ Big Ten School
❑ State school – public university
❑ Study abroad programs
❑ Availability of desired academic major
❑ Number of majors offered
❑ Successful graduate school placement of MSU grads
❑ Successful employment placement of MSU grads
❑ Referred by counselor or teacher
❑ MSU first choice among colleges applied to
❑ MSU only college applied to
❑ MSU best choice among colleges which accepted me
❑ MSU's party/social life reputation
❑ Student population size
❑ Student diversity
❑ Other _____

Directions: *Please put an "X" in the circle of the most appropriate answer*

EXTERNAL ASSETS: This section deals with the external factors that influence an individual's choices and behaviors.

1. Which type(s) of support do you receive from your parents? *Please mark all that apply.*	Finan-cial	Social advice	Academic advice	Career advise	Health stress issues
	O	O	O	O	O

2. How frequently do you communicate via phone, mail and/or in person with your parents while at school?	Daily	Several times per week	Once per week	Several times per month	Several times per seme-ster or less
	O	O	O	O	O

Please indicate the actual number for the following questions.	Zero	1-2	3-4	5-6	7 or more
3. Other than your parents, how many adults do you access for advice and support?	O	O	O	O	O
4. How many close friends do you have?	O	O	O	O	O
5. How many of your close friends attend MSU with you?	O	O	O	O	O
6. How many of your friends have been in trouble with the law?	O	O	O	O	O

Using the scale of 1 = Never, 2= Seldom, 3 = Some of the time, 4 = Frequently, and 5 = Always, please answer the following question for each person listed:

7. How often do you speak with the following people about important issues, concerns or your future?	1	2	3	4	5
Academic Advisor	O	O	O	O	O
Resident Advisor	O	O	O	O	O
Community Member	O	O	O	O	O
Adult neighbors	O	O	O	O	O
Faith based leaders	O	O	O	O	O
Department faculty	O	O	O	O	O
Graduate assistant	O	O	O	O	O
MSU support staff	O	O	O	O	O
Learning Resource Center	O	O	O	O	O
Landlord	O	O	O	O	O
Boss/Supervisor	O	O	O	O	O
MSU Police	O	O	O	O	O
MSU Alumni	O	O	O	O	O
Peers	O	O	O	O	O

Using the scale of ***SD*** = *Strongly dissatisfied*, ***D*** = *Dissatisfied*, ***S*** = *Satisfied*, ***VS*** = *Very satisfied*, *and* ***NA*** = *Not applicable*, please indicate your opinion regarding the following statement:

8. How satisfied have you been with the following MSU resources?	SD	D	S	VS	NA
Academic Advisement	O	O	O	O	O
Cafeteria	O	O	O	O	O
Computer Labs	O	O	O	O	O
Counseling Center	O	O	O	O	O
Human Resource Center	O	O	O	O	O
IMs - Intramural Sports and Recreative Services	O	O	O	O	O
Learning Resource Center	O	O	O	O	O
Libraries	O	O	O	O	O
Olin Health Center	O	O	O	O	O
Transportation	O	O	O	O	O
Writing Center	O	O	O	O	O
University Housing	O	O	O	O	O
Classrooms	O	O	O	O	O

Using the scale of ***SD*** = *Strongly disagree*, ***D*** = *Disagree*, ***A*** = *Agree*, ***SA*** = *Strongly Agree, and* ***NA*** = *Not applicable*, please indicate your opinion regarding the following statements:

	SD	D	A	SA	NA
9. Overall, MSU provides a caring and encouraging environment.	O	O	O	O	O
10. I have felt put down or been embarrassed by my professors at MSU.	O	O	O	O	O
11. I can go to adult family members for help and support when I need it.	O	O	O	O	O
12. My family doesn't care if I smoke.	O	O	O	O	O
13. My family doesn't care if I drink.	O	O	O	O	O
14. I relate well to my peers.	O	O	O	O	O
15. I can go to my friends for advice.	O	O	O	O	O
16. My friends don't care if I drink alcohol.	O	O	O	O	O
17. My friends don't care if I smoke cigarettes.	O	O	O	O	O
18. My friends are a very important part of my life	O	O	O	O	O
19. I feel my friends listen to me	O	O	O	O	O
20. My friends and I are supportive of each other during difficult times.	O	O	O	O	O
21. My friends encourage me to do and be my best in everything I do.	O	O	O	O	O
22. My friends care about me.	O	O	O	O	O
23. In my family there are clear rules about what I can and cannot do.	O	O	O	O	O
24. My parents made clear what is expected of me while in college.	O	O	O	O	O
25. My parents trust me to follow their values even while I am away at college.	O	O	O	O	O

	SD	D	A	SA	NA
26. I understand what is expected of me, as a student, by MSU.	O	O	O	O	O
27. MSU sets clear rules about what I can and cannot do.	O	O	O	O	O
28. MSU rarely enforces its rules for student behavior	O	O	O	O	O
29. It's okay to break MSU's rules.	O	O	O	O	O
30. I worry that I will get into trouble due to my behavior here on campus.	O	O	O	O	O
31. I adhere to the rules set by my residence hall or other place of residence	O	O	O	O	O
32. I stay away from trouble because I don't want to get arrested.	O	O	O	O	O
33. If another student saw me do something wrong, he or she should report me to the authorities	O	O	O	O	O
34. While underage, my friends and I do not or did not drink alcohol.	O	O	O	O	O
35. I usually just go along with what my friends tell me to do.	O	O	O	O	O
36. Helping other people is important to my friends.	O	O	O	O	O
37. Helping other people is important to me	O	O	O	O	O
38. Being spiritual or religious is important to me	O	O	O	O	O
39. I regularly attend religious activities	O	O	O	O	O
40. I have sometimes felt pressured to attend religious services different from my own faith since enrolling at MSU.	O	O	O	O	O
41. East Lansing residents make me feel a welcome part of the community	O	O	O	O	O
42. East Lansing landlords, leasing companies or apartment managers make me feel a welcome part of the community	O	O	O	O	O
43. I feel my needs are met by the social systems in my community of residence as a student.	O	O	O	O	O
44. MSU students have clear and respected roles as members of the East Lansing community	O	O	O	O	O
45. I care about the community of East Lansing	O	O	O	O	O
46. I am given lots of opportunities to make the East Lansing community a better place	O	O	O	O	O
47. I am given lots of opportunities to make the MSU community a better place	O	O	O	O	O
48. As a whole, I feel safe while on campus	O	O	O	O	O
49. I feel safe walking in the East Lansing community after dark	O	O	O	O	O

50. As a student, where would you prefer to live while attending MSU?

- O Residence Halls
- O University Apartments
- O Off campus- East Lansing
- O Lansing
- O Okemos
- O Haslett
- O Lansing Township
- O Other – Specify _____

	YES	NO
51. Are you registered to vote?	O	O
52. Are you registered to vote in East Lansing?	O	O

53. I feel that my concerns and opinions are heard and addressed by	SD	D	A	SA	NA
MSU faculty	O	O	O	O	O
MSU administration	O	O	O	O	O
MSU professional staff (librarians, advisors, secretaries,...)	O	O	O	O	O
MSU support staff (bus drivers, grounds keepers, cafeteria workers,...)	O	O	O	O	O
East Lansing community	O	O	O	O	O
My community of permanent residence	O	O	O	O	O
MSU Police	O	O	O	O	O
East Lansing Police and officials	O	O	O	O	O

54. How many hours per week do you normally spend	0 hours	1-2 hours	3-4 hours	5-6 hours	7 or more hours
in the library?	O	O	O	O	O
exercising?	O	O	O	O	O
studying, reviewing class notes or doing course related work?	O	O	O	O	O
retrieving, reading and answering email?	O	O	O	O	O
socializing with friends?	O	O	O	O	O
Alcohol-free partying?	O	O	O	O	O
Partying (drinking)?	O	O	O	O	O
watching TV?	O	O	O	O	O
surfing the internet?	O	O	O	O	O
playing video games?	O	O	O	O	O
engaged in or watching intramural sports?	O	O	O	O	O
engaged in or watching university athletics?	O	O	O	O	O
participating in events sponsored by university organizations or clubs?	O	O	O	O	O

	0 hours	1-7 hours	8-16 hours	17-29 hours	30 or more hours
55. How many hours per week do you work?	O	O	O	O	O

Please rate the frequency in which you or your friends do the following:	Never	Seldom	Sometime	Frequently	Always
56. My friends smoke cigarettes.	O	O	O	O	O
57. My friends do/use illicit drugs.	O	O	O	O	O
58. My friends smoke marijuana.	O	O	O	O	O
59. My friends engage in safe sex.	O	O	O	O	O
60. My friends drink alcohol.	O	O	O	O	O
61. I regularly participate in structured extracurricular activities, e.g. music, dance or art	O	O	O	O	O
62. I participate in dorm/residence hall sponsored activities.	O	O	O	O	O
63. I participate in Greek sponsored activities	O	O	O	O	O
64. I effectively balance school, work, family, friends, and fun	O	O	O	O	O
65. On Spring Breaks, how often do you do the following:					
vacation in the 'hot spots' for college students	O	O	O	O	O
work	O	O	O	O	O
study and do coursework	O	O	O	O	O
service to the community	O	O	O	O	O
spend time at home with family and friends	O	O	O	O	O

INTERNAL ASSETS: These questions examine the internal factors that influence your choices and behaviors.

Please answer Yes or No to the following questions:	YES	NO
66. My summer employment is related to my declared major	O	O
67. My employment during the school year is related to my declared major	O	O
68. I plan to study abroad for at least one semester	O	O
69. I am involved in university government	O	O
70. I would accept a poor grade before dropping a class	O	O
71. I have received a 1.0 (D) or lower in one or more classes	O	O
72. I have spent one or more semesters on the Dean's List	O	O
73. I own a computer	O	O
74. I have ready access to a computer with modem	O	O
75. I check my email daily for messages	O	O

Please rate the frequency in which you do the following:	Never	Seldom	Sometime	Frequently	Always
76. I read the newspaper or other non-class materials during class	O	O	O	O	O
77. I attend all class sessions	O	O	O	O	O
78. I complete all class readings before class sessions	O	O	O	O	O
79. I leave classes early	O	O	O	O	O
80. I arrive late to class	O	O	O	O	O
81. I fall asleep in class	O	O	O	O	O
82. I come to class drunk or high	O	O	O	O	O
83. I check my papers before submitting	O	O	O	O	O
84. I adequately prepare for exams and presentations	O	O	O	O	O
85. I work well by myself	O	O	O	O	O
86. I work well with others	O	O	O	O	O
87. I complete my assignments on time	O	O	O	O	O
88. I have cheated on exams since coming to MSU	O	O	O	O	O
89. I have plagiarized other works in my term papers since coming to MSU	O	O	O	O	O
90. I speak up/out in class	O	O	O	O	O
91. I lead class discussions	O	O	O	O	O
92. I visit faculty during office hours	O	O	O	O	O
93. I send email to faculty	O	O	O	O	O
94. I cram for exams the night before	O	O	O	O	O
95. I tutor other college students	O	O	O	O	O
96. I regularly set aside specific blocks of time to study	O	O	O	O	O
97. I learn best with study groups	O	O	O	O	O
98. How frequently do you participate in activities that are considered					
Illegal (unauthorized or prohibited by rules or laws)?	O	O	O	O	O
Dangerous (risky, hazardous or unsafe)?	O	O	O	O	O
Hurtful (causing mental and or physical injury or pain to self or others)?	O	O	O	O	O

Using the scale of ***SD*** = *Strongly disagree*, ***D*** = *Disagree*, ***A*** = *Agree*, ***SA*** = *Strongly agree, and* ***NA*** = *Not applicable*, please indicate your opinion regarding the following statements:

	SD	D	A	SA	NA
99. It bothers me when I don't do something well	O	O	O	O	O
100. I am aware of the education or training needed for my career options	O	O	O	O	O
101. I am provided with challenging and supportive courses	O	O	O	O	O
102. I plan to continue my schooling after I receive my Bachelor's degree	O	O	O	O	O
103. It is important for me to complete an internship before I graduate	O	O	O	O	O

		SD	D	A	SA	NA
104.	I will need a post baccalaureate degree or specialization certificate to qualify for gainful employment in my field of study	O	O	O	O	O
105.	It is important for me to have student membership in at least one professional organization	O	O	O	O	O
106.	Overall I enjoy college	O	O	O	O	O
107.	I like college for the academics	O	O	O	O	O
108.	I like college for the social atmosphere	O	O	O	O	O
109.	I think university required courses are important.	O	O	O	O	O
110.	At this time, college is not that important to me.	O	O	O	O	O
111.	I like my chosen major or the major I am considering	O	O	O	O	O
112.	There are plenty of jobs available in my major	O	O	O	O	O
113.	It is important to my parents that I do well in college	O	O	O	O	O
114.	If I received a low grade my parents would be upset.	O	O	O	O	O
115.	I respect other people's personal and civil rights	O	O	O	O	O
116.	It is important that I support equal rights and opportunities for all people	O	O	O	O	O
117.	I respect other people's ways of looking at things, their lifestyles, and their attitudes	O	O	O	O	O
118.	I consider other people's feelings when making decisions	O	O	O	O	O
119.	When friends go through hard times, I talk to them about how they feel	O	O	O	O	O
120.	I explain my beliefs and values when asked	O	O	O	O	O
121.	When asked I can explain why belief systems are "fair" and "not fair"	O	O	O	O	O
122.	I make decisions based on what I believe	O	O	O	O	O
123.	To get ahead, sometimes you have to lie, steal or cheat.	O	O	O	O	O
124.	I stand up for what I believe even when it is unpopular to do so.	O	O	O	O	O
125.	Sometimes I bend the truth so I can get my way.	O	O	O	O	O
126.	I tell the truth even when it is not easy.	O	O	O	O	O
127.	I accept responsibilities for my actions even when I make a mistake.	O	O	O	O	O
128.	I am likely to cheat in class to get a better grade.	O	O	O	O	O
129.	Overall, my father was a constant and influential presence in my life.	O	O	O	O	O
130.	Overall, my mother was a constant and influential presence in my life.	O	O	O	O	O
131.	I feel part of a group of friends	O	O	O	O	O
132.	I enjoy being with other people	O	O	O	O	O
133.	I avoid getting involved with others	O	O	O	O	O
134.	I have trouble fitting in with others	O	O	O	O	O
135.	I like to be alone	O	O	O	O	O

		SD	D	A	SA	NA
136.	I act without stopping to think	O	O	O	O	O
137.	I am good at learning from my mistakes	O	O	O	O	O
138.	I feel capable of coping with most of my problems	O	O	O	O	O
139.	I feel I can bounce back quickly from bad experiences	O	O	O	O	O
140.	I can keep a cool head in emergencies	O	O	O	O	O
141.	I see the humor in life even when things are not going well	O	O	O	O	O
142.	I often feel like beating or injuring someone	O	O	O	O	O
143.	I have temper outbursts I can't control	O	O	O	O	O
144.	I frequently get into arguments	O	O	O	O	O
145.	I can describe the qualities I want in a long-term relationship	O	O	O	O	O
146.	I can turn down a sexual advance if I'm not interested	O	O	O	O	O
147.	When I talk I usually get what I want.	O	O	O	O	O
148.	I choose my words carefully before I speak.	O	O	O	O	O
149.	I get my point across when I talk with people.	O	O	O	O	O
150.	When I talk with people, I make sure not to offend them.	O	O	O	O	O
151.	It is important that I not upset people when I talk with them	O	O	O	O	O
152.	I talk over problems with a friend	O	O	O	O	O
153.	I am good at interpreting non-verbal communication	O	O	O	O	O
154.	I listen to others and ask them questions about what they've said	O	O	O	O	O
155.	I clearly present my ideas to groups of people	O	O	O	O	O
156.	I express my ideas well in writing	O	O	O	O	O
157.	I consider all sides of the situation before making decisions	O	O	O	O	O
158.	I consider possible consequences before choosing to act	O	O	O	O	O
159.	I make friends easily	O	O	O	O	O
160.	I am comfortable initiating conversations with strangers	O	O	O	O	O
161.	I have been called a good listener	O	O	O	O	O
162.	I am good at planning ahead	O	O	O	O	O
163.	I hang out with people from different racial/ethnic backgrounds.	O	O	O	O	O
164.	Most of the time, I try to make friends with people from the same ethnic background as myself	O	O	O	O	O
165.	I enjoy being with people who are of a different ethnicity than I am.	O	O	O	O	O
166.	I know how to talk to people from other races without insulting them.	O	O	O	O	O
167.	I can adapt to other cultures when I need to.	O	O	O	O	O
168.	I try to learn about other cultures.	O	O	O	O	O
169.	I feel comfortable explaining my religious or spiritual beliefs to others	O	O	O	O	O

		SD	D	A	SA	NA
170.	All ethnic/racial groups living in the United States should practice American values and beliefs	O	O	O	O	O
171.	Sometimes I wish I could be a part of some other racial/ethnic group.	O	O	O	O	O
172.	I have strong ties to my cultural roots.	O	O	O	O	O
173.	I feel comfortable talking to others about my culture.	O	O	O	O	O
174.	People from different ethnic/racial groups seem to easily accept me.	O	O	O	O	O
175.	I can explain my own cultural background	O	O	O	O	O
176.	I stay away from people who might get me in trouble	O	O	O	O	O
177.	I have no problem saying *"no"* to my friends	O	O	O	O	O
178.	It is important that I am popular	O	O	O	O	O
179.	I believe I am popular among other students	O	O	O	O	O
180.	I can get along with members of the opposite sex	O	O	O	O	O
181.	My best friends never ask me to do anything illegal	O	O	O	O	O
182.	My best friends never drink and drive	O	O	O	O	O
183.	My best friends never let me drive drunk	O	O	O	O	O
184.	My friends would never physically hurt someone on purpose.	O	O	O	O	O
185.	I avoid riotous crowds and behaviors	O	O	O	O	O
186.	I would rather discuss a problem with someone instead of hitting or avoiding them.	O	O	O	O	O
187.	When I am in an argument, I try to listen to the other person's point of view.	O	O	O	O	O
188.	If someone is mad at me, I will go to him/her and ask about it in a calm manner.	O	O	O	O	O
189.	When someone is angry with me, I will avoid him/her at all costs.	O	O	O	O	O
190.	I ask for help when I need it	O	O	O	O	O
191.	I can explain how I am feeling (e.g. angry, happy, worried, depressed)	O	O	O	O	O
192.	I consider criticism without being very angry, sad, or defensive	O	O	O	O	O
193.	I can name three or more good things about myself	O	O	O	O	O
194.	I can name three things at which I'd like to be better	O	O	O	O	O
195.	I often feel unhappy, sad or depressed	O	O	O	O	O
196.	I often feel sure of who I am (what kind of person I am)	O	O	O	O	O
197.	I often feel lonely	O	O	O	O	O
198.	I often feel satisfied with myself the way I am	O	O	O	O	O
199.	I have trouble fitting in with others	O	O	O	O	O
200.	My life has purpose	O	O	O	O	O
201.	I am optimistic about my future	O	O	O	O	O

Risk Indicators/Behaviors: These questions concern behaviors which university administrators often consider risky. Please answer honestly and thoughtfully.

Please indicate the best possible answer to the following:	Yes	No
202. I know the medical guidelines for my weight in regards to my height	O	O

	Not important	Slightly important	Important	Very important	Extremely important
203. How important is it for you to have a perfect body?	O	O	O	O	O

	Very Dissatisfied	Not satisfied	Satisfied	Very satisfied	Extremely satisfied
204. How satisfied are you with your body?	O	O	O	O	O

	More than 25 lbs. below the ideal	10-25 lbs. below the ideal	Within 10 lbs. below or above the ideal	10-25 lbs. above the ideal	More than 25 lbs. above the ideal
205. Considering your ideal weight, how much do you weigh?	O	O	O	O	O

	Extremely under-weight	Under-weight	Average	Over-weight	Extremely over-weight
206. How would you describe yourself?	O	O	O	O	O

Using the scale of SD = Strongly disagree, D = Disagree, A = Agree, SA = Strongly agree, and NA = Not applicable, please indicate your opinion regarding the following statements:	SD	D	A	SA	NA
204. Drinking alcohol makes me feel good.	O	O	O	O	O
208. I will never drink or never drank alcohol while underage.	O	O	O	O	O
209. Drinking alcohol is a bad habit.	O	O	O	O	O
210. Drinking alcohol is not worth the risk to my health.	O	O	O	O	O
211. Smoking cigarettes should be legal for people under 18 years.	O	O	O	O	O
212. I will never smoke cigarettes.	O	O	O	O	O
213. Marijuana should be legalized.	O	O	O	O	O
214. I will never smoke marijuana.	O	O	O	O	O
215. There is nothing wrong with sniffing things (like glue, markers or doing whip hits) to get high.	O	O	O	O	O
216. I stay away from drugs because I do not want to become addicted.	O	O	O	O	O
217. There is nothing wrong with taking over the counter drugs to stay awake to study.	O	O	O	O	O
218. When someone is bothering me, they deserve to get punched.	O	O	O	O	O
219. I carry a weapon to feel safe.	O	O	O	O	O
220. I carry a gun or a knife for protection	O	O	O	O	O
221. Hitting, punching, or other violent acts make me feel good.	O	O	O	O	O

	SD	D	A	SA	NA
222. It's OK to fight back if someone is trying to physically hurt you.	O	O	O	O	O
223. Violence or physical force is the best way to solve problems	O	O	O	O	O
224. I am never violent with others	O	O	O	O	O

Please indicate the number of times	Never	Once	Twice	Three	4 or more
225. I have been ticketed/arrested for underage drinking or other alcohol use charge	O	O	O	O	O
226. I have been ticketed/arrested for violence related charges	O	O	O	O	O
227. I have been ticketed/arrested for weapons violation	O	O	O	O	O
228. I have been ticketed/arrested for personal crimes against others	O	O	O	O	O
229. I have been ticketed/arrested for other charges	O	O	O	O	O

Please indicate the frequency of your actions:

230. Within the last 30 days, on how many days did you do the following:	none	1-7 day	8-15 days	16-24 days	25-30 days
Have an alcoholic drink?	O	O	O	O	O
Have 3 or more alcoholic drinks in one day?	O	O	O	O	O
Smoke a cigarette?	O	O	O	O	O
Smoke 3 or more cigarettes in one day?	O	O	O	O	O
Smoke a marijuana joint?	O	O	O	O	O
Smoke 3 or more marijuana joints in one day?	O	O	O	O	O
Sniff something (like glue, markers, or doing whip hits) to get high?	O	O	O	O	O
Sniff a substance 3 or more times in one day?	O	O	O	O	O
Use an illegal substance to get high? *(i.e. Cocaine, speed, heroin)*	O	O	O	O	O
Use a sleep preventive drug to stay awake? *(i.e. No Doz, Vivarin, caffeine)*	O	O	O	O	O
Use a sleep aid to go to sleep?	O	O	O	O	O
Diet?	O	O	O	O	O
Food binge?	O	O	O	O	O
Induce vomiting after eating?	O	O	O	O	O
Take laxatives?	O	O	O	O	O
Commit a violent act?	O	O	O	O	O
Victim of violence?	O	O	O	O	O
Carry a weapon?	O	O	O	O	O
Witness the destruction of property?	O	O	O	O	O
Participate in the destruction of property?	O	O	O	O	O
Witness violence?	O	O	O	O	O

	none	1-7 day	8-15 days	16-24 days	25-30 days
Stopped by police for traffic violations?	O	O	O	O	O
Stopped or picked up by police for questioning?	O	O	O	O	O
Convicted of a crime?	O	O	O	O	O
Take something from a store without paying for it?	O	O	O	O	O
Skip a class?	O	O	O	O	O
Lie to a person in authority?	O	O	O	O	O
A willing sex partner?	O	O	O	O	O
Practiced safe sex measures?	O	O	O	O	O
Play the lottery?	O	O	O	O	O
Place bets on sports events?	O	O	O	O	O
Gamble on the computer?	O	O	O	O	O
Visit casinos in order to gamble?	O	O	O	O	O
Purchased an item with a credit card?	O	O	O	O	O
Contacted regarding a delinquent payment?	O	O	O	O	O

Please note your age of first occurrence	Never	12 or Younger	13-14 years	15-17 years	18 or older
231. How old were you when you first stole something?	O	O	O	O	O
232. How old were you when you had your first drink?	O	O	O	O	O
233. How old were you when you first became sexually active?	O	O	O	O	O

Please note the monetary amount	$0	$1 - 100	$101 - 500	$501-1000	More than $1000
234. What is the largest amount of money you've ever lost gambling?	O	O	O	O	O
235. What is the largest amount of money you've ever won gambling?	O	O	O	O	O

	$0	$1-1000	$1000-2500	$2501-5000	More than $5.000
236. How much money have you borrowed to finance your education?	O	O	O	O	O
237. What is the combined balance due on your credit cards?	O	O	O	O	O

Please note the amount	0	1-2	3-4	5-6	7 or more
238. How many credit cards do you have?	O	O	O	O	O
239. How many delinquent payments have you made on your credit cards?	O	O	O	O	O
240. How many times have you been denied credit or had a service discontinued due to non or delinquent payments?	O	O	O	O	O

Rate the degree of the following:	No stress	Little stress	Moderate stress	Very stressful	Most stressful
241. How stressful would you rate the following?					
Exams	O	O	O	O	O
Oral reports and presentations	O	O	O	O	O
Papers	O	O	O	O	O
Being called on in class	O	O	O	O	O
Money issues	O	O	O	O	O
Significant other	O	O	O	O	O
Roommate	O	O	O	O	O
Getting fired from work	O	O	O	O	O
Unplanned pregnancy	O	O	O	O	O
Being arrested	O	O	O	O	O
Being caught cheating	O	O	O	O	O

Rate the frequency of activity	Never	Hardly ever	Often	Most times	Always
242. How do you handle stress?					
Eat	O	O	O	O	O
Exercise/Run/Take a walk	O	O	O	O	O
Drink alcohol	O	O	O	O	O
Smoke	O	O	O	O	O
Pray	O	O	O	O	O
Sleep	O	O	O	O	O

Please note the amount	1-3	3-4	5-6	7-8	>8
243. How many hours of sleep do you average per night?	O	O	O	O	O

	Definitely not	Probably not	Don't know	Probably yes	Definitely yes
244. If I had to start my college career over, I would still choose to attend MSU.	O	O	O	O	O

	Very dissatisfied	Not satisfied	Satisfied	Very satisfied	Extremely satisfied
245. What is your satisfaction with the campus experience?	O	O	O	O	O
246. What is your satisfaction with the community?	O	O	O	O	O
247. What is your satisfaction with the overall college experience?	O	O	O	O	O

248. If you could make one suggestion to improve the experience at MSU what would it be?

APPENDIX B

MSUSAS External and Internal Asset Items Categorized by Asset

MSUSAS External and Internal Asset Items Categorized by Asset

Item #	Question	Assets Category
Support - support, positive communication, other adult relationships, caring neighborhood and school climate, parental involvement in school		
3	Other than your parents, how many adults do you access for advice and support?	Other adult relationships
7	How often do you speak with the following people about important issues, concerns or your future? A. Academic advisor B. Resident advisor C. Community member D. Adult neighbors E. Faith based leaders F. Department faculty G. Graduate assistant H. MSU support staff I. Learning resource center J. Landlord K. Boss/supervisor L. MSU police M. MSU Alumni	Other adult relationships
8	How satisfied have you been with the following MSU resources? A. Academic advisement B. Cafeteria C. Computer labs D. Counseling center E. Human resource center F. IMs- Intramural sports and recreative services G. Learning resource center H. Libraries I. Olin health center J. Transportation K. Writing center L. University housing M. Classrooms	Caring school climate

9	Overall, MSU provides a caring and encouraging environment.	Caring community
10	I have felt put down or been embarrassed by my professors at MSU	School climate
41	East Lansing residents make me feel a welcome part of the community	Caring community
42	East Lansing landlords, leasing companies or apartment managers make me feel a welcome part of the community	Caring community
43	I feel my needs are met by the social systems at work in my community of residence as a student	Caring community
45	I care about the community of East Lansing	Caring community
Empowerment - community values young adult, young adult as resources, service to others, safety		
46	I am given lots of opportunities to make the East Lansing community a better place	Young adults as resources
47	I am given lots of opportunities to make the MSU community a better place	Young adults as resources
51	Are you registered to vote?	Young adults as resources
52	Are you registered to vote in East Lansing?	Young adults as resources
48	As a whole, I feel safe while on campus	Safety
49	I feel safe walking in the East Lansing community after dark	Safety
50	As a student, where would you prefer to live while attending MSU?	Safety
44	MSU students have clear and respected roles as members of the East Lansing community	Community values youth
53	I feel that my concerns and opinions are heard and addressed by A. MSU faculty B. MSU administration C. MSU professional staff D. MSU support staff E. East Lansing community F. My community of permanent residence G. MSU police H. East Lansing police and officials	Community values youth
36	Helping other people is important to my friends	Service to others
37	Helping other people is important to me	Service to others

MSUSAS External and Internal Asset Items Categorized by Asset

Boundaries and expectations - boundaries, adult role models, positive peer influence, high expectations		
26	I understand what is expected of me, as a student, by MSU	school boundaries
27	MSU sets clear rules about what I can and cannot do	school boundaries
28	MSU rarely enforces its rules for student behavior	school boundaries
29	It's okay to break MSU rules	school boundaries
30	I worry that I will get into trouble due to my behavior here on campus	school boundaries
31	I adhere to the rules set by my residence hall or other place of residence	Community boundaries
33	If another student saw me do something wrong, he or she should report me to the authorities	Community boundaries
32	I stay away from trouble because I don't want to get arrested	High expectations
21	My friends encourage me to do and be my best in everything I do	High expectations
6	How many of your friends have been in trouble with the law?	Positive peer influence
7n	Peers	Positive peer influence
16	My friends don't care if I drink alcohol	Positive peer influence
17	My friends don't care if I smoke cigarettes	Positive peer influence
34	While underage, my friends and I do not or did not drink alcohol	Positive peer influence/
35	I usually just go along with what my friends tell me to do	Positive peer influence
56	My friends smoke cigarettes	Positive peer influence
57	My friends use or do illicit drugs	Positive peer influence
58	My friends smoke marijuana	Positive peer influence
59	My friends engage in safe sex	Positive peer influence
60	My friends drink alcohol	Positive peer influence

Constructive time use - creative activities, young adult programs, religious community, time at home		
38	Being spiritual or religious is important to me	Religious community
39	I regularly attend religious activities	Religious community
40	I have sometimes felt pressured to attend religious services different from my own faith since enrolling at MSU.	Religious community
54	How many hours per week do you normally spend...? A. In the library? B. Exercising? C. Studying, reviewing class notes or doing course related work? D. Retrieving, reading and answering email? E. Socializing with friends? F. Alcohol-free partying? G. Partying (drinking)? H. Watching TV? I. Surfing the internet? J. Playing video games? K. Engaged in or watching intramural sports? L. Engaged in or watching university athletics? M. Participating in events sponsored by university organizations or clubs?	Constructive time use
55	How many hours per week do you work?	Constructive time use
64	I effectively balance school, work, family, friends and fun	Constructive time use
65	On Spring Breaks, how often do you do the following...? A. Vacation in the "hot spots" for college students? B. Work? C. Study and do coursework? D. Service to the community? E. Spend time at home with family and friends?	Constructive time use
61	I regularly participate in structured extracurricular activities, e.g. music, dance or art.	Creative activities
62	I participate in dorm/residence hall sponsored activities	Young adult programs
63	I participate in Greek sponsored activities	Young adult programs

MSUSAS External and Internal Asset Items Categorized by Asset

Family and peer - support, communication, boundaries		
1	Which types of support do you receive from your parents? A. Financial B. Social advice C. Academic advice D. Career advice E. Health and stress issues	Parental Support
11	I can go to adult family members for help and support when I need it.	Family Support
2	How frequently do you communicate via phone, mail or in person with your parents while in school?	Positive Family Communication
4	How many close friends do you have?	Peer Support
5	How many of your close friends attend MSU with you?	Peer Support
14	I relate well to my peers	Peer Support
18	My friends are a very important part of my life	Peer Support
19	I feel my friends listen to me	Peer Support
20	My friends and I are supportive of each other during difficult times	Peer Support
22	My friends care about me	Peer Support
12	My family doesn't care if I smoke	family boundaries
13	My family doesn't care if I drink	family boundaries
23	In my family there are clear rules about what I can and cannot do	family boundaries
24	My parents made clear what is expected of me while in college	family boundaries
25	My parents trust me to follow their values even while I am away at college	family boundaries
Commitment to learning - achievement motivation, learning engagement, homework/study habits, bonding to school		
66	My summer employment is related to my declared major	Achievement motivation
67	My employment during the school year is related to my declared major	Achievement motivation
68	I plan to study abroad for at least one semester	Achievement motivation

MSUSAS External and Internal Asset Items Categorized by Asset

70	I would accept a poor grade before dropping a class	Achievement motivation
71	I have received a 1.0(D) or lower in one or more classes	Achievement motivation
72	I have spent one or more semesters on the Dean's List	Achievement motivation
111	I like my chosen major, or the major I am considering	Achievement motivation
112	There are plenty of jobs available in my major	Achievement motivation
113	It is important to my parents that I do well in college	Achievement motivation/ expectations
114	If I received a low grade my parents would be upset	Achievement motivation
99	It bothers me when I don't do something well	Achievement motivation
100	I am aware of the education or training needed for my career options	Achievement motivation
104	I will need a post baccalaureate degree or specialization certificate to qualify for gainful employment in my field of study	Achievement motivation
73	I own a computer	Achievement motivation
78	I complete all class readings before class sessions	Study habits
74	I have ready access to a computer with modem	Study habits
75	I check my email daily for messages	Study habits
83	I check my papers before submitting	Study habits
84	I adequately prepare for exams and presentations	Study habits
89	I have plagiarized other works in my term papers since coming to MSU	Study habits
94	I cram for exams the night before	Study habits
96	I regularly set aside specific blocks of time to study	Study habits
97	I learn best with study groups	Study habits
76	I read the newspaper or other non-class materials during class	Learning engagement
77	I attend all class sessions	Learning engagement
79	I leave classes early	Learning engagement
80	I arrive late to class	Learning engagement

81	I fall asleep in class	Learning engagement
82	I come to class drunk or high	Learning engagement
87	I complete my assignments on time	Learning engagement
90	I speak up/out in class	Learning engagement
91	I lead class discussions	Learning engagement
92	I visit faculty during school hours	Learning engagement
93	I send email to faculty	Learning engagement
95	I tutor other college students	Learning engagement
101	I am provided with challenging and supportive courses	Learning engagement
102	I plan to continue my schooling after I receive my Bachelor's degree	Learning engagement
103	It is important for me to complete an internship before I graduate	Learning engagement
105	It is important for me to have student membership in at least one professional organization	Learning engagement
109	I think university required courses are important	Learning engagement
110	At this time, college is not that important to me	Learning engagement
69	I am involved in university government	Bonding to school
106	Overall I enjoy college	Bonding to school
107	I like college for the academics	Bonding to school
108	I like college for the social atmosphere	Bonding to school
Positive values - caring, equality and social justice, integrity, honesty, responsibility, restraint		
119	When friends go through hard times, I talk to them about how they feel	Caring

115	I respect other people's personal and civil rights	Equality and social justice
116	It is important that I support equal rights and opportunities for all people	Equality and social justice
117	I respect other people's ways of looking at things, their lifestyles and their attitudes	Equality and social justice
121	When asked, I can explain why belief systems are "fair" and "not fair"	Equality and social justice
88	I have cheated on exams since coming to MSU	Integrity
122	I make decisions based on what I believe	integrity
123	To get ahead, sometimes you have to lie, steal or cheat	integrity
124	I stand up for what I believe even when it is unpopular to do so	integrity
128	I am likely to cheat in class to get a better grade	integrity
125	Sometimes I bend the truth so I can get my way	Honesty
126	I tell the truth even when it is not easy	Honesty
127	I accept responsibilities for my actions even when I make a mistake	Responsibility
98	How frequently do you participate in activities that are considered illegal, dangerous and/or hurtful?	Restraint
Social competencies - planning and decision-making, interpersonal competence, cultural competence, resistance skills, peaceful conflict resolution		
136	I act without stopping to think	Planning and decision-making
137	I am good at learning from my mistakes	Planning and decision-making
148	I choose my words carefully before I speak	Planning and decision-making
157	I consider all sides of the situation before making decisions	Planning and decision-making
158	I consider possible consequences before choosing to act	Planning and decision-making
162	I am good at planning ahead	Planning and decision-making
118	I consider other people's feelings when making decisions	Interpersonal competence

MSUSAS External and Internal Asset Items Categorized by Asset

85	I work well by myself	interpersonal competence
86	I work well with others	interpersonal competence
132	I enjoy being with other-people	interpersonal competence
133	I avoid getting involved with others	interpersonal competence
134	I have trouble fitting in with others	interpersonal competence
135	I like to be alone	interpersonal competence
151	It is important that I not upset people when I talk with them	interpersonal competence
152	I talk over problems with a friend	interpersonal competence
154	I listen to others and ask them questions about what they've said	Interpersonal competence
159	I make friends easily	Interpersonal competence
160	I am comfortable initiating conversations with strangers	Interpersonal competence
179	I believe I am popular among other students	Interpersonal competence
180	I can get along with members of the opposite sex	Interpersonal competence
199	I have trouble fitting in with others.	Interpersonal competence
147	When I talk I usually get what I want	Communication competence
149	I get my point across when I talk with people	Communication competence
155	I clearly present my ideas to groups of people	Communication competence
156	I express my ideas well in writing	Communication competence
161	I have been called a good listener	Communication competence
150	When I talk with people I make sure not to offend them	Cultural competence
153	I am good at interpreting non-verbal communication	Cultural competence

MSUSAS External and Internal Asset Items Categorized by Asset

163	I hang out with people from different racial/ethnic backgrounds	Cultural competence
164	Most of the time, I try to make friends with people from the same ethnic background as myself	Cultural competence
165	I enjoy being with people who are of a different ethnicity than I am	Cultural competence
166	I know how to talk to people from other races without insulting them	Cultural competence
167	I can adapt to other cultures when I need to	Cultural competence
168	I try to learn about other cultures	Cultural competence
169	I feel comfortable explaining my religious or spiritual beliefs to others	Cultural competence
170	All ethnic/racial groups living in the United States should practice American values and beliefs	Cultural competence
120	I explain my beliefs and values when asked	Cultural identity
171	Sometimes I wish I could be part of some other racial/ethnic group	Cultural identity
172	I have strong ties to my cultural roots	Cultural identity
173	I feel comfortable talking to others about my culture	Cultural identity
174	People from different ethnic/racial groups seem to easily accept me	Cultural identity
175	I can explain my own cultural background	Cultural identity
176	I stay away from people who might get me into trouble	Resistance skills
177	I have no problem saying "no" to my friends	Resistance skills
178	It is important that I am popular	Resistance skills
181	My best friends never ask me to do anything illegal	Resistance skills
182	My best friends never drink and drive	Resistance skills
183	My friends never let me drink and drive	Resistance skills
184	My friends would never physically hurt someone on purpose	Resistance skills
185	I avoid riotous crowds and behaviors	Resistance skills
140	I can keep a cool head in emergencies	Peaceful conflict resolution

142	I often feel like beating or injuring someone	Peaceful conflict resolution
143	I have temper outbursts I can't control	Peaceful conflict resolution
144	I frequently get into arguments	Peaceful conflict resolution
186	I would rather discuss a problem with someone instead of hitting or avoiding them	Peaceful conflict resolution
187	When I am in an argument, I try to listen to the other person's point of view	Peaceful conflict resolution
188	If someone is angry with me, I will go to him/her and ask about it in a calm manner	Peaceful conflict resolution
189	If someone is angry with me, I will avoid him/her at all costs	Peaceful conflict resolution
Positive identity - personal power, self-esteem. Sense of purpose, positive view of personal future		
138	I feel capable of coping with most of my problems	Personal power
145	I can describe the qualities I want in a long term relationship	Personal power
146	I can turn down a sexual advance if I'm not interested	Personal power
190	I ask for help when I need it	Personal power
191	I can explain how I am feeling (e.g. angry, happy, worried or depressed)	Personal power
195	I often feel unhappy, sad or depressed	Personal power
196	I often feel sure of who I am (what kind of person I am)	Personal power
197	I often feel lonely	Personal power
129	Overall, my father was a constant and influential presence in my life	Predictor Self-esteem
130	Overall, my mother was a constant and influential presence in my life	Predictor Self-esteem
131	I feel part of a group of friends	Predictor Self-esteem
99	It bothers me when I don't do something well	Self-esteem
192	I consider criticism without being very angry, sad or defensive	Self-esteem
193	I can name three or more good things about myself	Self-esteem

MSUSAS External and Internal Asset Items Categorized by Asset

194	I can name three things at which I'd like to be better	Self-esteem
198	I often feel satisfied with myself the way I am	Self-esteem
200	My life has purpose	Sense of purpose
141	I see the humor in life even when things are not going well	Positive view - future
139	I feel I can bounce back quickly from bad experiences	Positive view - future
201	I am optimistic about my future	Positive view - future