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EXPLORING THE RELIABILITY AND VALIDITY
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STUDENT ASSETS SURVEY

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SARAH E. LIVSEY

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EXPLORING THE RELIABILITY AND VALIDITY OF
THE MICHIGAN STATE UNIVERSITY STUDENT ASSETS SURVEY

By

Sarah E. Livsey

A THESIS

Submitted to
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ABSTRACT

EXPLORING THE RELAIBILITY AND VALIDITY
OF THE MICHIGAN STATE UNIVERSITY STUDENT ASSETS SURVEY

By

Sarah E. Livsey

This study sought to contribute to the area of positive youth development, and more specifically to the developmental assets framework. It did so by exploring the reliability and construct validity of a newly developed instrument to measure assets in a previously overlooked population of young people, college students. The instrument measures assets and risk behaviors in such students, as well as a number of demographic variables. The sample included 1083 students at Michigan State University. Scale reliabilities were examined and confirmatory factor analysis was used to explore construct validity. Reliability analyses resulted in the exclusion of 48 survey items and the combining of 6 scales into 3 scales. Confirmatory factor analysis of the updated model demonstrated good construct validity.

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INTRODUCTION

Although the area is still in its infancy, the past decade has witnessed a dramatic shift toward a "psychology of positive youth development" (Larson, 2000, pp. 170). The basic premise behind this shift is that we know a great deal about how the lives of children and adolescents go wrong, but less about why their lives go right. There exists a large amount of literature on adolescent risk of suicide (Barrios, Everett, & Simon, 2000; Brener, Hassen, & Barrios, 1999), juvenile delinquency (Smith, Kern, Curlette, & Mullis, 2001), and teen pregnancy (Miller, Benson, & Galbraith, 2001; Young, Martin, Young, & Ting, 2001). For example, risk of suicide has been tied to alcohol, tobacco, and illegal drug use (Barrios, Everett, & Simon, 2000), risk of juvenile delinquency to certain personality dynamics (Smith, Kern, Curlette, & Mullis, 2001), and teen pregnancy to parental supervision (Miller, Benson, & Galbraith, 2001), locus of control (Young, Martin, Young, & Ting, 2001), and peer relations (Miller-Johnson, Win, Coie, Maumary-Gremaud, Hyman, & Terry, 1999). However relatively little is known about why young people acquire social competencies, initiative, compassion, and direction and how these characteristics may serve to prevent future problems such as drug and alcohol abuse

(Larson, 2000, pp. 170). In summary, "positive youth development encompasses all our hopes and aspirations for a nation of healthy, happy, and competent adolescents on their way to productive and satisfying adulthood" (Roth, 2000, pp. 3).

Within the area of positive youth development, much attention has been given to identifying and measuring developmental assets. Developmental assets are defined as "a set of benchmarks for positive child and adolescent development, weaving together in an a priori conceptual model a taxonomy of developmental targets requiring both family and community engagement to ensure their acquisition" (Benson, Leffert, Scales, & Blyth, 1998, pp. 138). Most of the existing literature in this area is based upon the Search Institute's identification of the 40 assets necessary for adolescent development.

As of yet, the Search Institute has not extended its study of assets to college students. The extension of the assets framework to this population is of great importance, as the college years are critical in a young person's transition from adolescence to adulthood and present many unique challenges and opportunities for growth and development. Arnett (1995) refered to this time in a young person's life as "emerging adulthood," and considers it a

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unique developmental stage. Understanding the assets college-age students need to succeed will have significant implications for public policy and program development, as well as providing valuable information to parents, academic advisors, university faculty and staff, and the larger community.

The present study contributed to the existing assets literature. It did so in two ways. First, by extending the assets framework to a previously overlooked population of young people, college students and adding to what is known about Arnett's stage of emerging adulthood. And second, by exploring important psychometric properties of a newly developed instrument, the Michigan State University Student Assets Survey, (Keith, Villarruel, Gardner, Lumpkin, & Daenzer, 1999), created to measure a number of developmental assets and risk behaviors among such students.

The following literature review will explore in more depth the differences between positive youth development and other development approaches. The current literature on developmental assets will also be reviewed. This will be followed by a discussion on the limitations of the current assets literature, the importance of studying assets in college students, the relevance of the assets

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framework to Community Psychology, psychometric issues of reliability and validity and specific study goals.

LITERATURE REVIEW

While research on young adults is not novel, the purpose of this study was to examine a new instrument to measure behaviors, networks, and attitudes possessed by college students. If found to be reliable and valid, the Michigan State University Student Asset Survey (Keith, Villarruel, Gardner, Lumpkin, & Daenzer, 1999) can be used in future studies to identify developmental assets possessed by college students and link these assets to risk and non-risk behaviors. This section will begin with a review of the positive youth development framework, then outline the specific parameters within the areas of reliability and validity that have been examined through this investigation.

Positive Youth Development

This new way of viewing and researching youth development has six important characteristics that distinguish it from other youth development approaches. First, the goal of positive youth development is promotion of assets as opposed to prevention of problem behaviors. In the past, psychology has had much to say about how the lives of children and adolescents go wrong, but very little to say about how and why they go right (Larson, 2000). The purpose of positive youth development is to be "as

articulate about the attitudes, skills, behaviors, and values we wish young people to have as we are about those we do not want" (Pittman & Irby, 2000, pp. 157).

Second, the positive youth development approach does not believe in quick fixes. Those working within the positive youth development framework acknowledge that development is an ongoing process and is often quite complex. Therefore, a long-term ecological approach is necessary. It is also assumed that development requires engagement. Engagement "is fostered through relationships, influenced by environments and triggered by participation" (Pittman & Irby, 2000, pp. 159). In addition, strategies for encouraging positive development have moved beyond "the coordination of fragmented, problem-focused services" (Pittman & Irby, 2000, pp. 160). It must be recognized that one program or setting is not enough to give youth what they need and that joint accountability is necessary. The positive youth development approach also asserts that it is useless to ask at what age is it most appropriate to intervene in development, as it is an ongoing process and must be addressed as such.

Third, the scope of positive youth development extends beyond basic services. In the past, much emphasis has been placed on health care and education as being critical for

development. Positive youth development agrees that these services are important, but also expands its focus to include services to provide youth with things like nurturing, relationships and networks, and the opportunity to contribute to their communities (Pittman & Irby, 2000).

Forth, the settings seen as fundamental to youth development have been broadened by the new positive youth development approach. Previously, schools were most often the setting of focus. Positive youth development also focuses on families, neighborhoods, workplaces, service-agencies, and community-based organizations as important settings for development to occur (Pittman & Irby, 2000).

Next, positive youth development is in contrast to traditional resilience research. Resiliency research seeks to discover what factors contribute to positive development in the face of adversity (Luthar, Cicchetti, & Becker, 2000). For example, Werner and Smith (1992) assert that a positive mentor from a child's neighborhood can help to mediate adverse conditions. It has also been demonstrated that children with likable personalities, good problem solving skills, or self-efficacy may have better outcomes when faced with chronic adversity (Garmezy & Masten et al., 1990). In contrast to resiliency research, research within the positive youth development paradigm does not condone

labeling certain children as "at-risk."   It is believed that risk does not define potential. Since all children engage in development, all children need support and assistance (Pittman & Irby, 2000).

Finally, the positive youth development approach views children not only in terms of being recipients of services and supports, but as positive contributors to their own development and to their families and communities. Providing youth with opportunities to participate and add something of value to the settings in which they are a part is considered crucial (Pittman & Irby, 2000).

Although proponents of positive youth development assert that the developmental pathways of individuals vary across the life span, they also acknowledge that this approach has relevance for all life phases. In other words, while their work has focused primarily on adolescent-aged youth, they believe that positive youth development may further support and enhance the developmental pathways of all individuals.

Emerging from the positive youth development approach is a recent focus on developmental assets. In the following section, a description of the developmental assets framework will be provided as well as a review of the scientific literature in this area.

Developmental Assets

Much of the current literature in the area of positive youth development falls within the developmental assets framework. The primary goal of the developmental assets framework is to go beyond simply identifying problems and trying to alleviate them to establishing building blocks that youth need to grow up caring, competent, and healthy (Scales, 1999a). When present, these assets not only encourage valued behaviors, but also deter young people from engaging in risk-taking behaviors (Hawkins, Catalano, & Miller, 1992; Perkins & Borden, 2001; Robbins, 1995; Schorr, 1988; Werner, 1990; Zill, Nord, & Loomis, 1995). Within the assets framework most of the empirical research has focused on the forty (originally thirty) developmental assets put forth by the Search Institute, a non-profit research organization. The identification of the Search Institute assets was guided by scientific literature, expert practitioners, previous research, and a desire to connect to positive outcomes, balance external and internal factors, address the needs of all youth, and identify factors communities can readily promote (Benson, 1997; Leffert et al, 1998). For the past eleven years, using the survey: *Profiles of Student Life: Attitudes and Behaviors* (ABS; Search Institute, 1996), the Search Institute has

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advanced and measured developmental assets in more than one million sixth to twelfth-grade adolescents throughout the United States. In addition, recently the Search Institute has developed a similar set of developmental assets for infants, toddlers, preschoolers, and elementary-aged children. They are also embarking on new research efforts to measure and test the assets in the adolescent aged groups that have participated in their survey over the past decade to better comprehend how the risk and protective factors identified through their survey impact and support the developmental pathways of youth (Search Institute, 2000).

The developmental assets framework involves both individual and contextual factors that combine to contribute to positive developmental outcomes. The structure of the developmental asset framework has three major purposes. First, it provides a language for the important elements of positive youth development such as developmental processes, experiences, and resources that promote short and long-term well-being. Second, it provides a shared vision for different socializing systems. Finally, it seeks to empower such systems to take action (Leffert, Benson, Scales, Sharma Drake, & Blyth, 1998).

Assets are grouped into two domains of 20 external assets and 20 internal assets. Each of these domains contains four categories. External assets involve those provided by adults, schools, and the larger community. Internal assets include skills, competencies, and self-perceptions that develop as a result of socialization experiences and observations of the world over time. External assets include the categories of support, empowerment, boundaries and expectations, and constructive use of time. Internal assets include the categories of commitment to learning, positive values, social competencies, and positive identity (Leffert, Benson, Scales, Sharma Drake, & Blyth, 1998). A complete list of the Search Institute's 40 assets is presented in Appendix A.

A large amount of empirical literature supports the conceptualization of the categories of support (Brofenbrenner, 1991; Freeman, 1992; Scales & Gibbons, 1996; Werner & Smith, 1992; Zimmerman & Arunkumar, 1994; Ooms & Hara, 1992), boundaries and expectations (Henry, 1991; Jackson, Felner, Millstein, Pittman, & Selden, 1993; Arnett, 1995; Bandura, 1977; Hartup, 1996; Wheelock, 1992), constructive use of time (Esman, 1986; Dubas & Snider, 1993; Thomas & Carver, 1990; Fuligni & Stevenson, 1995),

and commitment to learning (Wentzel, 1993; Ainley, 1993; Elmen, 1991; Goodnow, 1993). A moderate amount of literature lends support to the asset categories of social competencies (Mann, Harmoni, & Power, 1989; Goleman, 1995; DuBois & Hirsch, 1990; Zimmerman, Sprecher, Langer, & Holloway, 1993) and positive identity (Gamble, 1994; Simmons & Blyth, 1987; Klacznski, 1990; Garmezy, 1993). A small sized literature supports the categories of empowerment (Blyth, & Hara, 1992; Peterson, Hurrelmann, & Leffort, 1993; Switzer, Simmons, Dew, & Regalski, 1995; Earls, 1994) and positive values (Chaskin, & Hawley, 1994; Beutel, & Marini, 1995; Pleck, Sonenstein, & Ku, 1993; Wentzel, 1991; Leffert, Benson, Scales, Sharma Drake, & Blyth, 1998).

Current studies within the assets framework have focused on four themes: (a) which assets are present in certain populations of young people and how many total assets they have, (b) how assets are related to risk outcomes, (c) how assets are related to thriving outcomes, and (d) how to build developmental assets in young people. Studies addressing each of these four themes will be discussed below.

How many assets do young people have?

During the 1996-1997 academic school year, the Search

Institute administered the *Profiles of Student Life:*

Attitudes and Behaviors (ABS; Search Institute, 1996)

survey to 99,462 young people between the ages of eleven to

eighteen throughout 213 towns and cities in the United

States (Benson, Leffert, Scales, & Blyth, 1998). See Table

1 for sample demographics. Much of literature regarding

developmental assets published by the Search Institute has

utilized a subset of this larger sample.

Based on an index of 0-40, the mean number of assets

attributed to the entire sample was 18. The mean number of

assets for sixth-graders was 21.5, while the mean number of

assets for twelfth-graders was a 17.2. This may indicate a

significant drop in assets with increasing age. It is

important to note however that assets may be changing over

time. In other words, the assets that are important for

one age group may not be the same for another. Also, the

importance of specific assets may vary depending on age.

Therefore, it is difficult to know whether assets are

really decreasing with age. Males in the sample had a mean

of 16.5 assets while females had a higher mean of 19.5

(Benson, Leffert, Scales, & Blyth, 1998).

Although the survey did not include any questions

addressing family income, a study by Benson (1996)

Table 1

Demographics for the Search Institutes 1996-1997 sample

Gender	%	Grade	%	Ethnicity	%
Female	50%	6th-8th grade	40%	Caucasian	80%
Male	50%	9th-12th grade	60%	Biracial	5%
				Latino	4%
				African American	2%
				Native American	2%
				Asian	2%

addressed this question. His study examined the correlation between income and number of assets in eleven planning districts throughout Minneapolis. Results indicated that as income level increased, so did the average number of assets.

Previous to the above study, survey results based upon the Search Institute's original thirty assets found that 14% of 6th to 12th-graders had 0-10 assets, 62% had 11-20 assets, 20% had 21-25 assets, and 4% had 26-30 assets (Benson, 1997). Overall results suggested that across hundreds of communities within the United States children were lacking in assets. Results also demonstrated that it is not only children labeled as "at risk" who are experiencing a shortage of assets. Although some differences do exist with regard to race, gender, town-size, and family income, a deficiency in assets appears to be a universal phenomenon. Across all communities studied, the range of average number of assets was from 14 to 18, with 83% of school districts averaging between 15 and 16.99 assets (Benson, 1997).

Racial and ethnic differences with regard to average total number of assets were minimal. Caucasian children averaged 16.51 assets, African Americans averaged 16.15,

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Asian Americans averaged 16.10, Native Americans averaged

15.27, and Hispanic American children averaged 15.25.

How are assets related to risk outcomes?

Numerous studies have consistently shown that as the

number of assets increase, risk behaviors decrease (Scales,

1999a; Benson, 1997; Leffort, Benson, Scales, Sharma,

Drake, & Blyth, 1998). For example, in a study based upon

the Search Institute's original list of 30 assets, using a

national sample of over 250,000 sixth through twelfth-

graders, it was found that as the average number of assets

increased the percentage of youth participating in risk

behaviors dropped. For example, the percentage of youth

who had gotten drunk one or more times in the past two

weeks decreased from 47% for youth with 0-10 assets to 4%

for youth with 26-30 assets. In addition, youth frequently

depressed or having attempted suicide decreased from 42%

for those with 0-10 assets to 5% for those youth 26-30

assets. Similar results were found for drug use, sexual

intercourse, antisocial behavior, violence, school

problems, and drunk driving (Benson, 1997).

In a similar study based upon the Search Institute's

revised list of 40 assets, of sixth to twelfth-graders in

Albuquerque the percentage of youth with the risk

indicators of alcohol use, tobacco use, sexual intercourse,

and violence decreased with increasing assets (Benson, 1997). See Table 2 for a summary of these results.

Based upon the Search Institutes 1996-97 sample, Leffert, et. al. (1998) used regression analysis to examine the relationship between the number of assets and risk behaviors. The study focused on the following risk behaviors: Alcohol, tobacco, and drug use, antisocial behavior and violence, depression and suicide, school problems, sexual intercourse, and gambling. Results indicated that different assets were associated with different risk behaviors. It was found that reduced risk of alcohol and substance abuse was most highly correlated with the assets of restraint and positive peer influence. Positive peer influence was also the strongest predictor of antisocial behavior and violence, with restraint, school engagement, time at home, resistance skills, and peaceful conflict resolution also contributing. Depression and suicidal ideation of or attempts were lower among those young people with a sense of purpose, self-esteem, positive peer influence, safety, and interpersonal competence. School problems were best predicted by the assets of achievement motivation, positive peer influence, school engagement, youth programs, and time at home. Assets which were correlated with lower rates of sexual intercourse

Table 2

<u>Albuquerque study: Percentage of youth engaging in risk by</u>

<u>level of assets</u>

	0-10 Assets	31-40 Assets
Alcohol Use	53%	4%
Tobacco Use	36%	2%
Sexual Intercourse	38%	2%
Violence	65%	7%

included restraint, positive peer influence, and time at home, while those correlated with reduced gambling were restraint, positive peer influence, peaceful conflict resolution, and other adult relationships. The two most important predictors based on the above risk behaviors appear to be positive peer influence and restraint, with peaceful conflict resolution, time at home, school engagement, and resistance skills also playing an important role (Leffert, Benson, Scales, Sharma, Drake, & Blyth, 1998).

Scales (1999a), utilizing a sample of almost 100,000 adolescents in over 200 communities found that assets, it addition to reducing risk indicators among widely varying populations of young people, also contribute to resiliency in youth experiencing developmental deficits such as physical abuse and unsupervised time at home. Results indicated that of those young people with all five of the deficits measured and an average number of assets, only 5% were risk-free. In contrast, 33% of youth with the same five deficits but a high level of assets were risk-free.

How are assets related to thriving indicators?

In addition to studies focused on the relationship between assets and risk behaviors, there have also been studies examining the correlation between assets and

thriving indicators. Thriving indicators are defined as "life-enhancing attitudes and behaviors" (Benson, 1997, pp. 59). Using the Search Institute's 1990-1995 national sample (examining the original 30 assets), it was found that as number of assets increased so did the percentage of young people with the thriving indicators of school success and volunteer service. School success was defined as students with mostly A's in school, while volunteer service was defined as volunteering one or more hours per week. Results indicated that 3% of youth with 0-10 assets experienced school success compared to 51% of youth with 26-30 assets. In addition, 15% of youth with 0-10 assets participated in volunteer service compared to 75% with 26-30 assets (Benson, 1997).

Another study, conducted by Scales, Benson, Leffert, and Blyth (2000) examined seven thriving indicators (i.e., school success, leadership, valuing diversity, physical health, helping others, delay of gratification, and overcoming adversity) and levels of youth assets. A multivariate analysis of covariance of Grade X Sex X Asset level was performed on the thriving indicators. Results indicated that number of assets was related significantly to the number of thriving indicators. Young people with a greater number of assets were more likely to experience

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success in school, delay gratification, have healthy eating and exercise habits, and overcome adversity (Scales, Benson, Leffert, & Blyth, 2000).

Results also indicated differences with regard to sex and grade level. Males were more likely than females to have the thriving indicator of leadership, while female students were more likely to report school success and the ability to resist dangerous situations. Also, younger students were more likely to affirm diversity than older students (Scales, Benson, Leffert, & Blyth, 2000).

Similar to the results found for risk behaviors, different assets predicted different thriving indicators. School success was most affected by the assets of school engagement, achievement motivation, and time spent in youth programs (for all youth except African Americans). Leadership, was predicted by time in youth programs (for all ethnic groups). Helping others was predicted by time spent in religions communities and time spent in youth programs. Physical health was predicted by planning and decision-making, self-esteem, and cultural competence. Time in youth programs also contributed to physical health with the exception of Native American and Asian American youth.

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Delay of gratification, was predicted by planning and decision-making, homework, cultural competence, and the value of responsibility. Valuing diversity was predicted by cultural competence, equality, and social justice. Finally, overcoming adversity was predicted by personal power and time spent in youth programs (Scales, Benson, Leffert, & Blyth, 2000).

Building developmental assets in young people

In addition to identifying and measuring developmental assets, work within this area is also focused on strategies to build assets in young people. Researchers have identified the following seven goals of community-based asset building. First, there must be a shared vision of positive development across communities. Second, there are certain norms and beliefs about development that should be shared within communities. These include a belief that all members of a community are responsible for the welfare of youth that community members can and should participate in asset building, and should be committed to inclusivity, intergenerational communities, and the empowerment and engagement of youth. Third, there should be connections across different socializing systems. These systems include families, schools, businesses, neighborhoods, religious institutions, and youth organizations. Fourth,

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asset building should happen everyday through simple acts such as including youth in leadership activities, adult modeling of values, service activities, etc. Fifth, there must be engagement of systems and organizations. Sixth, already existing asset-building activities such as peer helping, mentoring, service learning, and school-to-work initiatives should be identified, affirmed, and expanded. Seventh, new asset building initiatives should be introduced (Benson, 1997).

In summary, the current assets literature has focused on how many assets kids have, how total the number of assets relate to risk and thriving indicators, how specific assets relate to specific risk and thriving outcomes, and how to build assets. The studies cited have contributed significantly to what is know about assets. However, these studies are not without limitations. These limitations will be outlined below.

Limitations in the Current Assets Literature

A number of philosophical and scientific concerns have been raised regarding the Search Institute's research measuring developmental assets. First, it has been argued that positive youth development and the assets framework aren't really telling us anything new. Proponents of positive youth development have made the claim that it is

fundamentally different from resiliency. However whether one is focusing on reducing risk or promoting assets, it has been argued that the outcome is the same, a reduction in risk behaviors and an increase in thriving indicators.

Second, it has been noted that the Search Institute's samples are not nationally representative. Their data came from communities and school districts that chose to participate in the study. This resulted in an overrepresentation of Caucasian youth with educated parents. The sample also included a disproportionate number of youth from small towns and cities (Scales, 1999).

Third, it is probable that there are assets not being measured, either because they have not been properly conceptualized or because they have not been measured empirically (Scales, 1999).

Fourth, it is argued that the Search Institute data is correlational, meaning a cause and effect relationship cannot be assumed (Scales, 1999). There may not be a direct relationship between assets and risk and thriving indicators.

Fifth, researchers have argued that adding the assets together assumes that they are equivalent, which may not be the case. It could be that certain assets or groupings of assets are more important than others. Therefore this could

be an inadequate way to measure the phenomenon (Scales, 1999).

Sixth, past research has had much to say about how assets look across large groups of adolescents, but have not explored how assets look in individuals. Knowing how an individual's pattern of assets relates to thriving and risk outcomes has significant implications for community mobilization. Such information could provide parents, counselors, teachers, and others with valuable insight into specific strengths and needs of the young people with which they work.

Finally, to date the study of assets has not been extended to college students. The Search Institute has recently extended their study of assets to include elementary aged children and infants and toddlers. However, they have yet to explore assets in populations beyond the high-school years.

This study sought to address the final limitation by drawing upon a large sample of college students to explore reliability and validity issues of a newly developed instrument to measure assets and risk indicators in this population. Justification of the importance of including college students in research of assets, followed by a discussion of the relevance of the study of college assets

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to Community Psychology, reliability and validity and specific study goals is below.

<u>Assets and College Students</u>

Although most researchers and theorists in the area of developmental psychology agree that development continues over the lifespan (Dornbusch, 2000), to date the study of assets has focused only on the time period before a young person completes his or her transition into adulthood. One goal of this study is to extend the assets framework to the next developmental stage by studying college students.

In the past young people made swift transitions from adolescence to adulthood. Over the past 50 years however, dramatic demographic shifts have taken place changing the nature of and extending this transition. For example, the average age of marriage in the United States has gone from 21 for women and 23 for men in 1970 to 25 and 27 in 1996. The age of first child has gone up as well. In addition, 60% of young people now continue their education after high school compared to just 14% in 1940 (Arnett & Taber, 1994; Bianchi & Spain, 1996).

With these changes in mind, Arnett (2000) proposes a theory of development in which he identifies the late teens through the twenties, which for many are the college years, as a period distinct from both adolescence and young

adulthood. He refers to this period as "emerging

adulthood" and describes it as a time of "profound change

and importance" in which major life decisions are made

(Arnett, 2000, pp. 469). Young people in this stage have a

wide pool of potential activities to engage in and are less

restricted by role requirements (Arnett, 2000). Considering

the unique challenges and opportunities for growth

associated with this stage of development and with life as

a college student, understanding developmental assets in

this population is crucial.

For most, the transition from high school to college

is an exciting, but stressful one (Chickering, 1969).

Dornbusch, for example, notes that "Being uprooted from

established channels of activity causes the breakdown of

habitual patterns of action and forces the conscious

development of new modes of behavior that fit the novel set

of circumstances" (2000, pp. 1). College itself can also

be stressful for students as they try to juggle academic,

job, and social responsibilities and chores once performed

by parents or others (Koplik & Devito, 1986) as well as the

impact of reestablishing their emergent identity within the

context of an institution of higher education. In addition

to juggling numerous tasks, the academic demands placed on

students are considerably higher compared to those of high school (Levitz & Noel, 1989).

Because of the demands associated with college life, students may experience loneliness (Cutrona, 1982), feel homesick (Fisher & Hood, 1988), and in some cases may turn to drugs or alcohol (Sadava & Park, 1993) or experience serious health problems (Fisher, Murray, & Frazer, 1985). It is estimated that 30%-40% of freshman students will drop out of college due to these and other stressors (Rickinson & Rutherford, 1996). Despite the challenges college students face, the majority of them successfully navigate their way through the system, graduate, and move to the next stage in their lives. However, it is the responsibility of parents, faculty, administrators, advisors, and the larger community to ensure that all students reach their full potential and achieve their goals. In order to do this, there must exist an understanding of the assets students need to succeed, which assets students have, and where deficiencies exist. The next section will briefly outline the relevance of the assets framework to community psychology.

The assets framework and Community Psychology

The developmental assets framework draws upon two basic tenets of community psychology. First, it is

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strengths based in that it identifies positive

characteristics and resources as opposed to weaknesses and

risks possessed by young people. Second, it is applied and

community based. One central goal of the assets framework

is to empower and mobilize communities to actively address

the needs of the young people within them. Thinking

specifically about this study, if the MSUSAS is found to be

reliable and valid it can be used by the Michigan State

community to better identify and address the strengths and

needs of students. This will lead to a more positive,

successful experience for students and a stronger Michigan

State community. The next two sections will shift the

focus from a theoretical discussion of assets to an

overview of the important psychometric properties that were

explored through this study.

Reliability and Validity

Before any instrument can be considered a good measure

of a particular construct or set of constructs, it must be

deemed both reliable and valid. The three areas of

reliability are often referred to as temporal stability or

test/retest reliability, interscorer reliability, and

internal consistency. These refer to the degree to which

an instrument is stable, meaning the same results are

observed with repeated testing, dependable, meaning there

is agreement among different raters, and self-consistent, meaning various items in an instrument reflect the construct one is attempting to measure (Kendall & Norton-Ford, 1982). In the study of assets, test/retest reliability cannot be completely implied due to the non-static nature of assets. In other words, it is desirable to have an instrument that is stable over the short term, but because we expect assets to change over time, an instrument would not be expected to yield the same results over the long term. Interscorer reliability is also not relevant to this study as the instrument is a self-administered survey. As such, the current study will focus on the third of area of reliability, internal consistency.

A valid instrument is one in which the phenomenon one is attempting to measure is actually being measured. There are four types of validity. The first, face validity, simply means that the instrument seems on the surface to be relevant to the study's purposes. The second, content validity, means that an instrument "taps a representative sample of the universe of behaviors relevant to the variables being measured" (Kendall & Norton-Rord, 1982, pp. 229). Criterion-related, the third type of validity, means an instrument has the ability to accurately predict or agree with constructs that are external to those being

measured (Kendall & Norton-Rord, 1982; Nunnally &

Bernstein, 1994). Finally, construct validity means that

measured constructs correlate with other related constructs

in an expected manner (Kendall & Norton-Rord, 1982;

Nunnally & Bernstein, 1994). One technique used to explore

the validity of a measure is factor analysis, which was

used for this study and will be discussed in more depth

below.

Factor Analysis

Factor analysis is used to determine "the internal

statistical structures of a set of variables said to

measure a construct and the cross structures between the

different measures of one construct and those of the other

constructs" (Nunnally & Bernstein, 1994, pp. 111). In

other words, factor analysis refers to a set of techniques

used to identify groups of correlated variables and examine

the relationships of the groups to each other.

Factor analysis is a useful tool to employ when

exploring criterion-related, content, and construct

validity. It can be used to identify predictors, revise an

instrument, and examine internal and cross structures of

groups of variables (Nunnally & Bernstein, 1994). Factor

analysis can be confirmatory or exploratory depending on

whether one has a pre-established theory with regard to the

number of factors and the loading of variables on them or seeks to discover the underlying structure of a set of variables without a pre-established theory (Nunnally & Bernstein, 1994). In this study a confirmatory approach was utilized. Specific study goals are to follow.

<u>Study Goals</u>

Current research in the area of developmental assets has demonstrated that overall, adolescents with more assets appear to be better off with regard to a number of risk and thriving outcomes than adolescents with fewer assets. The research has also shown that single assets may be particularly important in preventing or encouraging specific risk and thriving outcomes. What these studies do not reveal is how assets look in college students. In order to study college assets and in order to be able to link these assets to risk and thriving indicators, a comprehensive, reliable, and valid measurement instrument is needed. The primary goal of this study was to examine the reliability and validity of the Michigan State University Student Asset Survey (Keith, Villarruel, Gardner, Lumpkin, & Daenzer, 1999) measuring college assets and risk indicators. Specifically, scale reliabilities were determined by examining item-total correlations, an all item by all scale and an all scale by all scale

correlation matrix. A confirmatory factor analysis was conducted to verify validity.

In conclusion, this study has extended the assets framework to a new population of young people, college students within the developmental stage of emerging adulthood, and provided psychometric information about a new instrument to measure such assets and risk indicators. The methods used for this study are described below.

METHOD

Sample

The survey was distributed to students at Michigan State University, a large land grant university in East Lansing, Michigan. The approximate undergraduate enrollment at Michigan State is 43,340, with 6,771 students listed as ethnic minorities (Harrison, 2000). Sample demographics can be found in Table 3.

Procedures

Originally sophomores were chosen for participation in the study. However, when sampling procedures did not yield an adequate number of ethnic minority students, additional strategies were undertaken to ensure representation of such students. This resulted in a sample composed primarily of sophomores, but also included a number of freshman, junior, and senior students. Sampling procedures for both groups are discussed separately below.

The Michigan State University Student Assets Survey was mailed via campus mail and the United States Postal Service to all sophomore students (as reported by the registrar's office) residing within the cities surrounding Michigan State University (as determined by zip code). These cities included: East Lansing, Haslet, Holt, Mason, Lansing, and Okemos. Sophomores were selected to sample

Table 3

Michigan State University Student Assets Survey sample
demographics

Class	N	Gender	N	Ethnicity	%	Age	%
Sophomore	1014	Female	761	Caucasian	77.5%	20	50.6%
Freshman	15	Male	302	African	12.6%	21	22.9%
Junior	41			American		19	13.1%
Senior	4			Asian	3.3%	22	5.6%
				American		>19	4.7%
				Hispanic	3.3%	<23	3.3%
				Native	1.1%		
				American			
				Other	1.4%		

because they are still in a period of transition into the college environment. Freshman were not selected due to the large number of students dropping out during this first year (or registering without actually enrolling in any courses), making sampling more difficult.

Student participation was encouraged through the use of an incentive. Students were instructed that if they returned the survey by the assigned deadline their name would be entered into a drawing for cash prizes and gift certificates. The response rate was approximately 28%.

Targeted sampling to ensure adequate representation of ethnic minority students at Michigan State University involved three methods. First, student organizations, including the Office of Minority Student Affairs, the Black Student Alliance, and the Black Graduate Student Association, were asked to distribute surveys to their members. Second, several professors volunteered to distribute surveys to their classes. And third, one professor encouraged students to give surveys to their ethnic minority friends in return for extra credit points.

Prior to survey distribution, each student was assigned an I.D. number to insure confidentiality. The I.D. numbers were placed on the top right corner of each survey. The file linking I.D. numbers to names was secured

in a locked cabinet. A consent to participate form was included as the first page of the survey. Returned surveys were entered and cleaned by supervised undergraduate research assistants.

Although the sampling procedures yielded a disproportionate number of females and included a number of non-sophomore students, the entire sample was included in analysis. This decision was made to ensure the inclusion of ethnic minority students and to maximize power. Missing data accounts for approximately 6% of the data. Due to the large sample size and relatively small amount of missing data, the decision was made to simply exclude missing data from analysis (as opposed to alternatives such as mean substitution).

Measurement

The measurement instrument used for this study was a 248-item survey called the Michigan State University Student Asset Survey (MSUSAS) (Keith, Villarruel, Gardner, Lumpkin, & Daenzer, 1999). The survey was created to measure a number of assets and risk behaviors in college students. The survey questions were modeled after four existing surveys (Search Institute: Profiles of Student Life Attitudes and Behaviors, Community Assets Developed for Youth, The Ansell Casey Life Skills Assessment, and The

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Ohio State Community and Adolescent Research Project). The remaining questions were generated through the use of focus groups.

The survey was designed to measure assets within the categories of support, empowerment, boundaries and expectations, constructive use of time, learning commitment, positive values, social and cultural competencies, and positive identity. The survey also measured a number of risk behaviors including dieting, substance use, violence, sexual behavior, gambling and credit card debt, and stress.

The MSUSAS contained 248 Likert and non-Likert questions (with many numbered questions having more than one item) measuring assets and risk behaviors. A summary of the question types can be found in Table 4. In addition to these questions there were also 26 demographic items used to determine the students' ethnicity, age, gender, class standing, other university related information, family information, and reasons for attending Michigan State University. The complete survey can be found in Appendix B.

Analysis

Two types of analysis were utilized to examine the reliability and construct validity of the MSUSAS. First,

Table 4

Michigan State University Student Assets Survey item types

Response set types	Number of anchor points	Anchor points	Number of items
Likert	4	Strongly disagree to strongly agree	178
Numerical	5	Varied	66
Likert	4	Very satisfied to strongly dissatisfied	13
Likert	5	Never to always	39
Likert	5	Definitely not to definitely yes	1
Likert	5	No stress to most stressful	11
Checklist	N/A	N/A	2
Dichotomous	2	Yes and no	10
Open-ended	N/A	N/A	1
Likert	5	Not important to extremely important	1

reliability of survey items was determined by examining item-total correlations for each scale, an all item by all scale correlation matrix, and an all scale by all scale correlation matrix. Second, factor analysis was utilized to explore the measure's construct validity. Prior to these analyses items were reverse coded as appropriate. In addition, a data verification step was undertaken to check for any errors in frequency and range of scores for each item. If an item had over 90% agreeability (in other words of over 90% of respondents answered the same way for a given item), it was eliminated (as such an item is useless for analysis in that does not discriminate between respondents). Also, items with a "non-applicable" answer choice, originally coded as missing, were examined and when appropriate were recoded to indicate a mid-point in the scale (in other words, were considered as "no-opinion" and coded as 3 in a 5 point scale). This dramatically reduced the percentage of missing data.

Reliability. Using SPSS, reliability analysis was conducted on each of the individual asset scales. Corrected item-total correlations were examined. If a scale contained items with item-total correlations .30 or greater below the highest item-total correlation, the item was examined, and where conceptually appropriate, removed

from the scale. This process was repeated until all problematic items were removed from the scales.

Next, an all item by all scale correlation matrix was computed to further explore scale reliabilities and a scale by scale correlation matrix was examined to determine if any highly correlated scales should be combined.

Construct validity. To verify construct validity, a hierarchical confirmatory factor analysis was conducted using LISREL 8.3. Asset categories (support, empowerment, boundaries and expectations, constructive use of time, family and peer support, commitment to learning, positive values, and social competencies) served as second order general factors and were expected to account for the covariance among the latent variables (assets). The latent variables would, in turn, account for covariance among the individual survey items. See Table 5 for a summary of the expected relationship between asset categories and assets and the number of individual variables intended to measure each asset (based upon the updated model).

Several different indices were examined to determine the fit of the hypothesized model. These included the Chi-square value, the RMSEA (root mean square error of approximation), and the CFI (comparative fit index). The model was considered a good fit if the Chi-square value was

Table 5

Relationship between asset categories and individual assets

Asset Category	Assets
Support	Other adult relationships (11 items) Caring school climate (10 items) Caring community (5 items)
Empowerment	Young adults as resources (2 items) Safety (2 items) Community values youth (8 items) Service to others (2 items)
Boundaries and expectations	School boundaries (4 items) Community boundaries (2 items) High expectations (2 items) Positive peer influence (8 items)
Constructive use of time	Religious community (2 items) Constructive use of time (3 items) Creative activities (1 item)
Family and peer support	Parental support (5 items) Family support (1 item) Positive family communication (1 item) Peer support (7 items) Family boundaries (5 items)
Commitment to learning	Achievement motivation (6 items) Study habits and learning engagement (16 items) Bonding to school (3 items)
Positive values	Caring (1 item) Equality and social justice (3 items) Integrity (5 items) Honesty (2 items) Responsibility (3 item) Restraint (1 item)
Social competencies	Planning and decision-making and peaceful conflict resolution (14 items) Interpersonal competence (6 items) Communication competence (5 items) Cultural competence (10 items) Cultural identity (4 items) Resistance skills (6 items)
Positive identity	Personal power and self esteem (15 items) Sense of purpose (1 item) Positive view of the future (3 items)

low, if the RMSEA was less than .05 (between .05 and.10

will be considered a moderate fit), and if the CFI was over

.90.

RESULTS

Prior to reliability and validity analyses, 46 survey items were reverse coded so as to be directionally consistent with other survey items (higher numbers indicating more positive responses). See Appendix C for a list of these items. In addition, descriptive statistics (frequencies and ranges) were computed and examined for each item. Six items were discarded due to high agreeability (90% or greater). See Appendix D for a description of discarded items. Results of reliability and validity analyses are presented below. See Appendix E for survey items organized by scale and domain (original model).

Reliability

Upon examination of corrected item-total correlations for each asset scale, 40 items from 17 asset scales (with some scales having more than one item) were found to be problematic. These items had item-total correlations .30 or greater below the highest item-total correlation in the scale and did not fit well conceptually with the other items. Eighteen scales did not have any problematic items.

Problematic items were removed and reliability analyses were rerun for each scale. Through this process, three additional scales were identified which included poor

fitting items. Again, these items (N=8) were removed and the three scales were rerun. No additional problems were revealed through this third level of analysis. Alpha's ranged from .39 for the two-item honesty scale to .95 for the five-item parental support scale. The average alpha for all 33 scales was .67. See Appendix F for final item total correlations and alphas for each individual scale.

Following reliability analyses, an all item by all scale correlation matrix was computed. All individual survey items were significantly correlated at the .01 level with asset scales in an expected manner. The 48 items previously eliminated from the scales were examined, but were not found to correlate significantly with any other scales.

Review of an all scale by all scale correlation matrix resulted in the combining of several scales. Scales were combined if they correlated above .40 and it made conceptual sense to do so. Learning engagement and study habits (correlating at .443), personal power and self-esteem (correlating at .474), and peaceful conflict resolution and planning and decision (correlating at .424) were combined into single scales. Alphas for the combined scales were .73, .75, and .76 respectively. See

Table 6 for reliability statistics for the combined scales and Table 7 for a full scale-by-scale correlation matrix.

Validity

Construct validity, based upon the updated model (refer to Table 5), was verified using hierarchical confirmatory factor analysis. The Chi-square value was 694.5, the RMSEA .090 and the CFI .88. These indices suggest a moderate to good fit and as such demonstrate reasonable construct validity of the model.

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Item

#14C
#186
#187
#188
#142
#143
#144
#189
#136
#13
#14
#15
#15
#16

Table 6

Reliability statistics for combined scales

Scale: Peaceful Conflict Resolution and Planning and Decision Making		Scale: Personal Power and Self Esteem		Scale: Learning Engag. and Study Habits	
Item	Corrected Item Total Correlations	Item	Corrected Item Total Correlation	Item	Corrected Item Total Correlation
		#138	0.36	#77	0.34
#140	0.25	#145	0.31	#87	0.36
#186	0.43	#146	0.2	#90	0.31
#187	0.46	#190	0.36	#91	0.32
#188	0.44	#196	0.41	#92	0.48
#142	0.35	#191	0.44	#93	0.39
#143	0.45	#195	0.46	#101	0.31
#144	0.37	#197	0.36	#102	0.29
#189	0.26	#129	0.22	#103	0.18
#136	0.36	#130	0.35	#105	0.3
#137	0.35	#131	0.38	#110	0.28
#148	0.34	#192	0.28	#94	0.17
#157	0.42	#193	0.52	#78	0.4
#158	0.47	#194	0.28	#83	0.37
#162	0.33	#198	0.45	#84	0.47
				#96	0.4

Table 7

All scale by all scale correlation matrix

	1	2	3	4	5
01. **Other adult relationships**	1				
02. **Caring school climate**	.082**	1			
03. **Caring community**	.128*	.099**	1		
04. Religious community	.206**	-.003	.036	1	
05. Constructive use of time	.101**	.084**	-.053	.005	1
06. **School boundaries**	.124**	.060	.313**	.055	-.026
07. **Community boundaries**	.082**	.050	.241**	.148**	.020
08. **Positive peer influence**	.176**	.023	.090**	.253**	.080*
09. Young adults as resources	.166**	.018	.330**	.075*	-.033
10. Safety	.015	.081**	.236**	-.052	-.086**
11. Community values youth	.197**	.131**	.440**	.061*	.034
12. Service to others	.176**	.005	.175**	.226**	.035
13. **Parental support**	.185**	-.73*	.072*	.027	-.081**
14. **Peer support**	.159**	.009	.196**	.071*	-.124**
15. **Family boundaries**	.096**	.000	.181**	.159**	.004
16. Personal power	.139**	.047	.207**	.111**	-.005
17. Self esteem	.104**	.039	.241**	.134**	-.050
18. Positive view of future	.089**	.044	.118**	.048	-.013
19. **Planning decision making**	.068*	.038	.095**	.123**	.000
20. **Interpersonal competence**	.114**	-.073	.158**	.058	-.098**
21. **Communication compet.**	.093**	-.003	.056	.075*	.041
22. **Cultural competence**	.146**	.006	.132**	.179**	.004
23. **Cultural Identity**	.143**	-.054	.155**	.159**	-.050
24. **Resistance skills**	.129**	.049	.184**	.188**	.070
25. **Peaceful conflict resolut.**	.096**	.109**	.165**	.096**	.013
26. Achievement motivation	.048	.000	.187**	.020	-.049
27. Study habits	.173**	.023	.124**	.101**	.119**
28. Learning engagement	.241**	-.100**	.160**	.137**	.099**
29. Bonding to school	.119**	.036	.327**	-.017	.025
30. **Equality and social justice**	.038	.081**	.073*	.068*	.010
31. **Integrity**	.059	.110**	.109**	.131**	.164**
32. **Honesty**	.116**	.081**	.092**	.143**	.163**
33. **Responsibility**	.069*	.046	.126**	.204**	.110**

* Significant at .05
** Significant at .01

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Table 7
Cont.

	6	7	8	9	10
01. Other adult relationships					
02. Caring school climate					
03. Caring community					
04. Religious community					
05. Constructive use of time					
06. School boundaries	1				
07. Community boundaries	.182**	1			
08. Positive peer influence	.086**	.366**	1		
09. Young adults as resources	.234**	.133**	.065*	1	
10. Safety	.047	.006	-.065*	.105**	1
11. Community values youth	.295**	.175*	.148**	.350**	.210**
12. Service to others	.199**	.123**	.168**	.139**	-.060*
13. Parental support	.041	.025	.035	.054	.071*
14. Peer support	.072*	-.026	-.117**	.046	.035
15. Family boundaries	.195**	.164**	.168**	.098**	.017
16. Personal power	.218**	.167**	.102**	.127**	.039
17. Self esteem	.155**	.068*	-.032	.162**	.102**
18. Positive view of future	.074*	.039	-.028	.025	.172**
19. Planning decision making	.130**	.210**	.133**	.076*	.016
20. Interpersonal competence	.064*	-.025	-.197**	.051	.054
21. Communication compet.	.073*	.049	-.001	.024	-.014
22. Cultural competence	.143**	.111**	.078*	.114**	.036
23. Cultural Identity	.114**	.116**	.015	.098**	.036
24. Resistance skills	.179**	.344**	.529**	.067*	-.047
25. Peaceful conflict resolut.	.156**	.155**	.125**	.095**	.051
26. Achievement motivation	.087*	.044	-.030	.037	.057
27. Study habits	.109**	.192**	.120**	.068*	-.096**
28. Learning engagement	.154**	.110**	.072*	.128**	-.009
29. Bonding to school	.187**	.065*	-.049	.115**	.147**
30. Equality and social justice	.112**	.151**	.052	.095**	-.032
31. Integrity	.148**	.236**	.252**	.036	-.026
32. Honesty	.116**	.256**	.206**	.064*	-.032
33. Responsibility	.123**	.446**	.561**	.051	-.036

* Significant at .05
** Significant at .01

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Table 7
cont.

	11	12	13	14	15
01. Other adult relationships					
02. Caring school climate					
03. Caring community					
04. Religious community					
05. Constructive use of time					
06. School boundaries					
07. Community boundaries					
08. Positive peer influence					
09. Young adults as resources					
10. Safety					
11. Community values youth	1				
12. Service to others	.134**	1			
13. Parental support	.058	.071*	1		
14. Peer support	.078*	.324**	.119**	1	
15. Family boundaries	.100**	.222**	.118**	.173**	1
16. Personal power	.149**	.271**	.113**	.272**	.213**
17. Self esteem	.155**	.258**	.116**	.398**	.293**
18. Positive view of future	.074*	.133**	.039	.166**	.053
19. Planning decision making	.130**	.210**	.044	.069*	.138**
20. Interpersonal competence	.064*	.251**	.037	.504**	.202**
21. Communication compet.	.073*	.232**	.084**	.249**	.177**
22. Cultural competence	.143**	.297**	.053	.195**	.101**
23. Cultural Identity	.114**	.123**	.034	.100**	.145**
24. Resistance skills	.179**	.287**	.061*	.030	.030
25. Peaceful conflict resolut.	.156**	.264**	.075*	.186**	.135**
26. Achievement motivation	.087**	.156**	.042	.167**	.391**
27. Study habits	.109**	.214**	.065*	.124**	.124**
28. Learning engagement	.154**	.200**	.070*	.150**	.150**
29. Bonding to school	.187**	.113**	.062*	.259**	.130**
30. Equality and social justice	.112**	.260**	.035	.117**	.121**
31. Integrity	.148**	.192**	.047	.023	.115**
32. Honesty	.116**	.165**	.042	-.037	.046
33. Responsibility	.123**	.114**	.002	-.211**	.130**

* Significant at .05
** Significant at .01

Table 7
Cont.

	16	17	18	19	20
01. Other adult relationships					
02. Caring school climate					
03. Caring community					
04. Religious community					
05. Constructive use of time					
06. School boundaries					
07. Community boundaries					
08. Positive peer influence					
09. Young adults as resources					
10. Safety					
11. Community values youth					
12. Service to others					
13. Parental support					
14. Peer support					
15. Family boundaries					
16. Personal power	1				
17. Self esteem	.474**	1			
18. Positive view of future	.440**	.333**	1		
19. Planning decision making	.408**	.284**	.227**	1	
20. Interpersonal competence	.386**	.464**	.286**	.204**	1
21. Communication compet.	.423**	.359**	.317**	.291**	.398**
22. Cultural competence	.364**	.342**	.293**	.346**	.341**
23. Cultural Identity	.269**	.268**	.167**	.143**	.242**
24. Resistance skills	.281**	.156**	.109**	.270**	.019
25. Peaceful conflict resolut.	.450**	.353**	.314**	.424**	.317**
26. Achievement motivation	.217**	.321**	.164**	.141**	.240**
27. Study habits	.315**	.212**	.090**	.345**	.185**
28. Learning engagement	.309**	.296**	.163**	.201**	.351**
29. Bonding to school	.266**	.325**	.253**	.121**	.308**
30. Equality and social justice	.240**	.268**	.137**	.227**	.195**
31. Integrity	.269**	.176**	.134**	.268**	.068*
32. Honesty	.220**	.102**	.110**	.263**	.029
33. Responsibility	.117**	-.066	-.053	.172**	-.165

* Significant at .05
** Significant at .01

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Table 7
Cont.

	21	22	23	24	25
01. Other adult relationships					
02. Caring school climate					
03. Caring community					
04. Religious community					
05. Constructive use of time					
06. School boundaries					
07. Community boundaries					
08. Positive peer influence					
09. Young adults as resources					
10. Safety					
11. Community values youth					
12. Service to others					
13. Parental support					
14. Peer support					
15. Family boundaries					
16. Personal power					
17. Self esteem					
18. Positive view of future					
19. Planning decision making					
20. Interpersonal competence					
21. Communication compet.	1				
22. Cultural competence	.369**	1			
23. Cultural Identity	.272**	.291**	1		
24. Resistance skills	.120**	.187**	.123**	1	
25. Peaceful conflict resolut.	.252**	.339**	.157**	.321**	1
26. Achievement motivation	.213**	.093**	.141**	.131**	.175**
27. Study habits	.230**	.192**	.124**	.267**	.262**
28. Learning engagement	.335**	.278**	.264**	.175**	.211**
29. Bonding to school	.214**	.201**	.182**	.096**	.234**
30. Equality and social justice	.192**	.192**	.093**	.218**	.332**
31. Integrity	.164**	.285**	.117**	.355**	.363**
32. Honesty	.103**	.209**	.126**	.256**	.317**
33. Responsibility	-.026	.061	.075*	.522**	.128**

* Significant at .05
** Significant at .01

Table 7
Cont.

	26	27	28	29	30
01. Other adult relationships					
02. Caring school climate					
03. Caring community					
04. Religious community					
05. Constructive use of time					
06. School boundaries					
07. Community boundaries					
08. Positive peer influence					
09. Young adults as resources					
10. Safety					
11. Community values youth					
12. Service to others					
13. Parental support					
14. Peer support					
15. Family boundaries					
16. Personal power					
17. Self esteem					
18. Positive view of future					
19. Planning decision making					
20. Interpersonal competence					
21. Communication compet.					
22. Cultural competence					
23. Cultural Identity					
24. Resistance skills					
25. Peaceful conflict resolut.					
26. Achievement motivation	1				
27. Study habits	.149**	1			
28. Learning engagement	.328**	.443**	1		
29. Bonding to school	.289**	.208**	.320**	1	
30. Equality and social justice	.244**	.204**	.199**	.212**	1
31. Integrity	.126**	.311**	.211**	.204**	.347**
32. Honesty	.002	.210**	.139**	.089**	.213**
33. Responsibility	.193**	.193**	.075*	-.080*	.088*

* Significant at .05
** Significant at .01

Table 7
Cont.

	31	32	33
01. **Other adult relationships**			
02. **Caring school climate**			
03. **Caring community**			
04. Religious community			
05. Constructive use of time			
06. **School boundaries**			
07. **Community boundaries**			
08. **Positive peer influence**			
09. Young adults as resources			
10. Safety			
11. Community values youth			
12. Service to others			
13. **Parental support**			
14. **Peer support**			
15. **Family boundaries**			
16. Personal power			
17. Self esteem			
18. Positive view of future			
19. **Planning decision making**			
20. **Interpersonal competence**			
21. **Communication compet.**			
22. **Cultural competence**			
23. **Cultural Identity**			
24. **Resistance skills**			
25. **Peaceful conflict resolut.**			
26. Achievement motivation			
27. Study habits			
28. Learning engagement			
29. Bonding to school			
30. **Equality and social justice**			
31. **Integrity**	1		
32. **Honesty**	.414**	1	
33. **Responsibility**	.281**	.257**	1

* Significant at .05
** Significant at .01

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DISCUSSION

This study explored the expected relationship between
survey items in terms of reliability (specifically the
internal consistency of items) and construct validity.
Slightly over half of individual asset scales were found
reliable upon initial analysis. These scales were: caring
community, service to others, community boundaries, high
expectations, parental support, peer support, family
boundaries, integrity, honesty, responsibility, planning
and decision making, communication competence, peaceful
conflict resolution, personal power, self esteem, and
positive view of future. The remaining scales were
examined and modified so as to be both statistically
reliable and conceptually sound. Forty-eight total items
were removed from the following scales: other adult
relationships, caring school climate, young adults as
resources, safety, community values youth, school
boundaries, positive peer influence, religious community,
constructive use of time, achievement motivation, study
habits, learning engagement, bonding to school, equality
and social justice, interpersonal competence, cultural
identity, and resistance skills. One two-item scale, young
adult programs, was eliminated due to very low reliability

(reducing the asset category of constructive use of time from 4 to 3 assets).

Next, upon examination of a scale-by-scale correlation matrix, several highly correlated asset scales were combined. This resulted in a reduction in the number of individual assets within three asset categories. The category of commitment to learning was reduced from 4 assets to 3 assets, social competencies from 7 to 6 assets, and positive identity from 4 to 3 assets.

Analysis reduced the total number of survey items from 248 to 200 and the number of individual assets measured by these items from 41 to 37 (note that 6 assets, creative activities, family support, positive family communication, caring, restraint, and sense of purpose, were measured with only one item and were not included in reliability analysis).

Validity analysis demonstrated that the predicted relationship between domains (external vs. internal), asset categories (N=9), assets (N=37), and individual survey items was sound.

Resulting from this study is psychometric information that can be used at the design and analysis phases of future studies utilizing the Michigan State University Student Asset Survey. Limitations of this study as well as

recommendations for future studies utilizing the MSUSAS and possible future directions in the study of college assets are presented below.

Limitations of Current Study

There are several limitations of this study that should be kept in mind when interpreting results. First, participation was voluntary, therefore results may be biased in that students with certain characteristics may have been more likely to respond than others. This is particularly problematic given the low response rate.

Second, the sample included an overrepresentation of female and Caucasian students. As such, results cannot be generalized beyond these populations.

Third, this study focused on construct validity, but revealed nothing about content and criterion-related validity. It is possible that there are additional assets that were not captured in this survey.

Fourth, the framework used by the Search Institute to study assets may not be appropriate for the study of college students. Also, it is useful for communities to have assets broken down in to very specific categories such as the Search Institute's list of 40 assets, however for empirical studies, use of this many dimensions is highly unusual. It is likely the 37 college assets identified and

described in this study could be combined into fewer assets if the Search Institute's structure was not maintained.

Finally, it should be noted that future use of the information from this study will vary depending on the specific goals and objectives of the project. For example, certain items identified as having high agreeability, making them useless for analysis purposes, or items that do not fit well within an asset scale, may be retained in the survey if the information they illicit is deemed important to the purpose of the project (e.g., it may be valuable for certain segments of the Michigan State community to know that 93% of students have access to a computer). On the other hand, if this information is not determined necessary, these items can be removed to reduce the survey's length.

Strengths of Current Study

Despite the limitations of the study, there were some strengths that should be noted. First, there was a large sample size. Second, this was one of the first studies to address the issue of assets and college students. Finally, this study was one of the first to report psychometric properties of an instrument to measure assets.

Recommendations for Future Studies Using the MSUSAS

There are several survey construction and sampling issues that should be addressed in future studies utilizing the Michigan State University Student Assets Survey. First, as stated earlier, items identified through this study as unreliable or lacking variability should be removed to reduce length, unless they are deemed necessary to achieve project goals. Second, items with an "non-applicable" answer choice should be examined and when conceptually appropriate, revised. This can be done by either removing the "non-applicable" choice and retaining the 4 point scale or changing the "non-applicable" answer choice to "no opinion" and placing it in the center of the scale (making it a 5 point scale). Either option will help to reduce missing data.

Future sampling techniques should work to ensure a more representative sample, including a greater number of males and ethnic minority students. Strategies could include over-sampling males and ethnic minority students or employing targeted sampling techniques. A more representative sample will increase the generalizability of results.

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Future Directions in the Study of College Assets

Because the study of college assets is just beginning, there are a number of critical areas to be explored. First, descriptive information should be presented. This includes how many assets college students have, which assets they have, and how assets vary by demographic variables such as race, sex, and school size. One could also compare other segments of the student population such as students living in dorms with students living in off campus student apartments. Questions of how differing levels of structure affect assets would be important information to have, especially considering the large amount of off campus undergraduate housing currently being built around the Michigan State campus.

Second, links between assets and risk and thriving indicators should be examined using a variety of simple and sophisticated statistical techniques, including cluster analysis to identify patterns of assets in individual students. As mentioned previously, until now the study of assets has focused on large groups of young people, but has not explored how assets look in individual young people and what their pattern of assets might mean for their lives.

Third, the study of assets should be expanded to include a variety of post-high school educational

institutions, including community colleges and trade schools. In addition, comparison of different types universities should be undertaken. For example, a study of the assets of Black students at traditionally Black institutions compared to those at predominately white institutions would shed new light on what these types of institutions can provide for Black students.

Fourth, qualitative techniques should be included to ensure that all relevant college assets are identified and understood. It would be interesting to explore qualitatively which assets students view as being important to college success and why.

Finally, questions of how to promote assets within college communities must be addressed. A central goal of the assets framework is to empower communities to take action on behalf of the young people within them. This goal should not be lost within the study of college assets. Ways to educate and establish links between various segments of the university community, the larger community surrounding the university, and the support networks of individual students (such as family, friends, neighbors, etc.) should be explored.

Search Institute's 40 Developmental Assets

<u>Support</u>
1. Family Support-Family life provides high levels of love and support.
2. Positive Family Communication-Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents.
3. Other Adult Relationships-Young person receives support from three or more non-parent adults.
4. Caring Neighborhood-Young person experiences caring neighbors.
5. Caring School Climate-School provides a caring, encouraging environment.
6. Parent Involvement in Schooling-Parent(s) are actively involved in helping young person succeed in school.

<u>Empowerment</u>
7. Community Values Youth-Young person perceives that adults in the community value youth.
8. Youth as Resources-Young people are given useful roles in the community.
9. Service to Others-Young person serves in the community one hour or more per week.
Boundaries and Expectations
10. Safety-Young person feels safe at home, school, and in the neighborhood.
11. Family Boundaries-Family has clear rules and consequences and monitors the young person's whereabouts.
12. School Boundaries-School provides clear rules and consequences.
13. Neighborhood Boundaries-Neighbors take responsibility for monitoring young people's behavior.

<u>Constructive Use of Time</u>
14. Adult Role Models-Parent(s) and other adults model positive, responsible behavior.
15. Positive Peer Influence-Young person's best friends model responsible behavior.
16. High Expectations-Both parent(s) and teachers encourage the young person to do well.
17. Creative Activities-Young person spends three or more hours per week in lessons or practice in music, theater, or other arts.

18. Youth Programs-Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community.
19. Religious Community-Young person spends one or more hours per week in activities in a religious institution.
20. Time at Home-Young person is out with friends "with nothing special to do" two or fewer nights per week.

Commitment to Learning
21. Achievement Motivation-Young person is motivated to do well in school.
22. School Engagement-Young person is actively engaged in learning.
23. Homework-Young person reports doing at least one hour of homework every school day.
24. Bonding to School-Young person cares about her or his school.
25. Reading for Pleasure-Young person reads for pleasure three or more hours per week.

Positive Values
26. Caring-Young person places high value on helping other people.
27. Equality and Social Justice-Young person places high value on promoting equality and reducing hunger and poverty.
28. Integrity-Young person acts on convictions and stands up for her or his beliefs.
29. Honesty-Young person "tells the truth even when it is not easy."
30. Responsibility-Young person accepts and takes personal responsibility.
31. Restraint-Young person believes it is important not to be sexually active or to use alcohol or other drugs.

Social Competencies
32. Planning and Decision Making-Young person knows how to plan ahead and make choices.
33. Interpersonal Competence-Young person has empathy, sensitivity, and friendship skills.
34. Cultural Competence-Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds.
35. Resistance Skills-Young person can resist negative peer pressure and dangerous situations.
36. Peaceful Conflict Resolution-Young person seeks to resolve conflict nonviolently.

<u>Positive Identity</u>

37. Personal Power-Young person feels he or she has control over "things that happen to me."

38. Self-Esteem-Young person reports having a high self-esteem.

39. Sense of Purpose-Young person reports that "my life has a purpose."

40. Positive View of Personal Future-Young person is optimistic about her or his personal future

Appendix B

Michigan State University Student Assets Survey

This survey assesses the positive characteristics and strengths of Michigan State University students. The information will be shared with university administrators and community officials in order to develop positive responses to college students needs. This effort has involved MSU students in the initial design and they will be involved in all phases of the study.

You have the right not to answer specific questions. However, we encourage you to be as complete in your responses as possible.

All information collected in this study will be aggregated; no individual can be identified in the reports or presented to university and community officials.

Your return of this survey is your voluntary agreement to participate in this study.

If you have any questions you can contact Dr. Francisco Villarruel at fvilla@msu.edu.

Thank you for your cooperation.

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 grade point average_____

Do you have a faculty advisor? __Yes   __No

Your Ethnicity (Please indicate all that apply):

__African American
__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 a group of students
__Off-campus apartment
__At parents/legal guardian's home

Who do you live with this year while attending MSU?

__I live alone
__1-3 roommates
__4 or more roommates
__Cohabitate with partner
__Legal spouse (no children)
__Spouse and children
__Child or children (no spouse)
__Parents or legal guardians
__with relatives other than parents

Are you parents/guardians: (check one)

__Married
__Divorced
__Separated
__Never married and living together
__Never married and not living together
__One parent is deceased
__Both parents are deceased

Who do you 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
__Middle
__Youngest
__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 2,500 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
__1501 or 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
__Sister
__Mother
__Father
__Spouse
__Cousin
__Other relative
__No relatives currently attend

What type 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 or 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 space of the most appropriate answer

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

1. What type(s) of support do you receive from your parents? Please mark all that apply.

__Financial
__Social advice
__Academic advice
__Career advice
__Health stress issues

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 semester or less

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?

4. How many close friends do you have?

5. How many of your close friends attend MSU with you?

6. How many of your friends have been in trouble with the law?

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

7. How often do you speak with the following people about important issues?
     Academic advisor
     Resident advisor
     Community member
     Adult neighbors
     Faith based leaders
     Department faculty
     Graduate assistant
     MSU support staff
     Learning resource center
     Landlord
     Boss/supervisor
     MSU police
     MSU alumni

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

8. How satisfied have you been with the following MSU resources?

    Academic advisement
    Cafeteria
    Computer labs
    Counseling center
    Human resource center
    Ims- Intramural sports and recreative services
    Learning resource center
    Libraries
    Olin health center
    Transportation
    Writing center
    University housing
    Classrooms

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

9. Overall, MSU provides a caring and encouraging environment.

10. I have felt put down or been embarrassed by my professors at MSU.

11. I can go to adult family members for support when I need it.

12. My family doesn't care if I smoke.

13. My family doesn't care if I drink.

14. I relate well to my peers.

15. I can go to my friends for advice.

16. My friends don't care if I drink alcohol.

17. My friends don't care if I smoke cigarettes.

18. My friends are a very important part of my life.

19. I feel my friends listen to me.

20. My friends and I are supportive of each other during difficult times.

21. My friends encourage me to do and be my best in everything I do.

22. My friends care about me.

23. In my family there are clear rules about what I can and cannot do.

24. My parents made clear what is expected of me while in college.

25. My parents trust me to follow their values even while I am away at college.

26. I understand what is expected of me, as a student, by MSU.

27. MSU sets clear rules about what I an and cannot do.

28. MSU rarely enforces its rules for student behavior.

29. It's okay to break MSU's rules.

30. I worry that I will get into trouble due to my behavior here on campus.

31. I adhere to the rules set by my residence hall or other place of residence.

32. I stay away from trouble because I don't want to get arrested.

33. If another student saw me do something wrong, he or she should report me to the authorities.

34. While underage, my friends and I do not or did not drink alcohol.

35. I usually just go along with what my friends tell me to do.

36. Helping other people is important to my friends.

37. Helping other people is important to me.

38. Being spiritual or religious is important to me.

39. I regularly attend religious activities.

40. I have sometimes felt pressured to attend religious services different from my own faith since enrolling at MSU.

41. East Lansing residents make me feel a welcome part of the community.

42. East Lansing landlords, leasing companies or apartment managers make me feel a welcome part of the community.

43. I feel my needs are met by the social systems in my community of residence as a student.

44. MSU students have clear and respected roles as members of the East Lansing community.

45. I care about the community of East Lansing.

46. I am given lots of opportunities to make the East Lansing community a better place.

47. I am given lots of opportunities to make the MSU community a better place.

48. As a whole, I feel safe while on campus.

49. I feel safe in the East Lansing community after dark.

50. As a student, where would you prefer to live while attending MSU?
    __Residence halls
    __University apartments
    __Off campus- East Lansing
    __Lansing
    __Okemos
    __Haslett
    __Lansing Township
    __Other-Specify_____

51. Are you registered to vote?   __Yes   __No

52. Are you registered to vote in East Lansing __Yes   __No

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

53. I feel that my concerns and opinions are heard and addressed by:
    MSU faculty
    MSU administration
    MSU professional staff (librarians, secretaries…)
    MSU support staff (bus drivers, grounds keepers…)
    East Lansing community
    My community of permanent residence
    MSU police
    East Lansing police and officials

Use the following scale 0 hours, 1-2 hours, 3-4 hours, 5-6 hours, 7 or more hours, to answer the following questions:

54. How many hours per week do you spend:
    in the library
    exercising
    studying, reviewing class notes, or going course work
    retrieving, reading, and answering e-mail
    socializing with friends
    alcohol-free partying
    partying (drinking)
    watching TV
    surfing the internet
    playing video games
    engaged in or watching intramural sports
    engaged in or watching university athletics
    participating in events sponsored by MSU oranizations

55. How many hours per week do you work?
    __0 hours
    __1-7 hours
    __8-16 hours
    __17-29 hours
    __30 or more hours

Please rate the frequency in which you or your friends do the following, Never, Seldom, Sometimes, Frequently, or Always.

56. My friends smoke cigarettes.

57. My friends do/use illicit drugs.

58. My friends smoke marijuana.

59. My friends engage in safe sex.

60. My friends drink alcohol.

61. I regularly participate in structured extracurricular activities, e.g. music, dance, or art.

62. I participate in dorm/residence hall sponsored activities.

63. I participate in Greek sponsored activities.

64. I effectively balance school, work, family, and friends.

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65. On spring break, how often do you do the following:
    Vacation in the "hot spots" for college students
    Work
    Study and do coursework
    Service to the community
    Spend time at home with family and friends.

Internal assets: There questions examine the internal factors that influence your choices and behaviors.

Please answer Yes or No to the following questions:

66. My summer employment is related to my declared major.

67. My employment during the school year is related to my declared major.

68. I plan to study abroad for at least one semester.

69. I am involved in university government.

70. I would accept a poor grade before dropping a class.

71. I have received a 1.0(D) or lower in one or more classes.

72. I have spent one or more semesters on the Dean's List.

73. I own a computer.

74. I have ready access to a computer with modem.

75. I check my email daily for messages.

Please use the following scale to rate the frequency in which you do the following, Never, Seldom, Sometimes, Frequently, and Always:

76. I read the newspaper or other non-class materials during class.

77. I attend all class sessions.

78. I complete all class readings before class sessions.

79. I leave classes early.

80. I arrive late to class.

81. I fall asleep in class.

82. I come to class drunk or high.

83. I check my papers before submitting.

84. I adequately prepare for exams and presentations.

85. I work well by myself.

86. I work well with others.

87. I complete my assignments on time.

88. I have cheated on exams since coming to MSU.

89. I have plagiarized other works in my term papers since coming to MSU.

90. I speak up/out in class.

91. I lead class discussions.

92. I visit faculty during office hours.

93. I send email to faculty

94. I cram for exams the night before.

95. I tutor other college students.

96. I regularly set aside specific blocks of time to study.

97. I learn best with study groups.

98. How frequently do you participate in activities that are considered:
    Illegal-unauthorized or prohibited
    Dangerous-risky, hazardous, or unsafe
    Hurtful-causing mental and/or physical injury or pain

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

99. It bothers me when I don't do something well.

100. I am aware of the education or training needed for my career options.

101. I am provided with challenging and supportive courses.

102. I plan to continue my schooling after I receive my Bachelor's degree.

103. It is important to me to complete an internship before I graduate.

104. I will need a post baccalaureate degree or specialization certificate to qualify for gainful employment in my field of study.

105. It is important for me to have a student membership in at least one professional organization.

106. Overall I enjoy my college.

107. I like college for the academics.

108. I like college for the social atmosphere.

109. I think university required classes are important.

110. At this time, college is not that important to me.

111. I like my chosen major or the major I am considering.

112. There are plenty of jobs available in my major.

113. It is important to my parents that I do well in college.

114. If I received a low grade my parents would be upset.

115. I respect other people's personal and civil rights.

116. It is important that I support equal rights and opportunities for all people.

117. I respect other people's ways of looking at things, their lifestyles, and their attitudes.

118. I consider other people's feelings when making decisions.

119. When friends go through hard times, I talk to them about how they feel.

120. I explain my beliefs and values when asked.

121. When asked I can explain why belief systems are "fair" and "not fair."

122. I make decisions based on what I believe.

123. To get ahead, sometimes you have to lie, steal, or cheat.

124. I stand up for what I believe even when it is unpopular to do so.

125. Sometimes I bend the truth so I can get my way.

126. I tell the truth even when it is not easy.

127. I accept responsibilities for my actions even when I make a mistake.

128. I am likely to cheat in class to get a better grade.

129. Overall, my father was a constant and influential presence in my life.

130. Overall, my mother was a constant and influential presence in my life.

131. I feel part of a group of friends.

132. I enjoy being with other people.

133. I avoid getting involved with others.

134. I have trouble fitting in with others.

135. I like to be alone.

136. I act without stopping to think.

137. I am good at learning from my mistakes.

138. I feel capable of coping with most of my problems.

139. I feel I can bounce back quickly from bad experiences.

140. I can keep a cool head in emergencies.

141. I see the humor in life even when things are not going well.

142. I often feel like beating or injuring someone.

143. I have temper outbursts I can't control.

144. I frequently get into arguments.

145. I can describe the qualities I want in a long-term relationship.

146. I can turn down a sexual advance if I'm not interested.

147. When I talk I usually get what I want.

148. I choose my words carefully before I speak.

149. I get my point across when I talk with people.

150. When I talk with people, I make sure not to offend them.

151. It is important that I not upset people when I talk with them.

152. I talk over problems with a friend.

153. I am good at interpreting non-verbal communication.

154. I listen to others and ask them questions about what they've said.

155. I clearly present my ideas to groups of people.

156. I express my ideas well in writing.

157. I consider all sides of the situation before making decisions.

158. I consider possible consequences before choosing to act.

159. I make friends easily.

160. I am comfortable initiating conversations with strangers.

161. I have been called a good listener.

162. I am good at planning ahead.

163. I hang out with people from different racial/ethnic backgrounds.

164. Most of the time, I try to make friends with people from the same ethnic background as myself.

165. I enjoy being with people who are of a different ethnicity than I am.

166. I know how to talk to people from other races without insulting them.

167. I can adapt to other cultures when I need to.

168. I try to learn about other cultures.

169. I feel comfortable explaining my religious or spiritual beliefs to others.

170. All ethnic/racial groups living in the United States should practice American values and beliefs.

171. Sometimes I wish I could be a part of some other racial/ethnic group.

172. I have strong ties to my cultural roots.

173. I feel comfortable talking to others about my culture.

174. People from different ethnic/racial groups seem to easily accept me.

175. I can explain my own cultural background.

176. I stay away from people who might get me in trouble.

177. I have no problem saying "no" to my friends.

178. It is important that I am popular.

179. I believe that I am popular among other students.

180. I can get along with members of the opposite sex.

181. My best friends never ask me to do anything illegal.

182. My best friends never drink and drive.

183. My best friends never let me drive drunk.

184. My friends would never physically hurt someone on purpose.

185. I avoid riotous crowds and behaviors.

186. I would rather discuss a problem with someone instead of hitting or avoiding them.

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.

189. When someone is angry with me, I will avoid him/her at all costs.

190. I ask for help when I need it.

191. I can explain how I am feeling (e.g. angry, happy, worried, depressed).

192. I consider criticism without being very angry, sad, or defensive.

193. I can name three or more good things about myself.

194. I can name three things at which I'd like to be better.

195. I often feel unhappy, sad, or depressed.

196. I often feel sure of who I am (what kind of person I am).

197. I often feel lonely.

198. I often feel satisfied with myself the way I am.

199. I have trouble fitting in with others.

200. My life has purpose.

201. I am optimistic about my future.

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:

202. I know the medical guidelines for my weight in regards to my height? __Yes   __No

203. How important is it for you to have a perfect body?
     __Not important
     __Slightly important
     __Important
     __Very important
     __Extremely important

204. How satisfied are you with your body?
    __Very dissatisfied
    __Not satisfied
    __Satisfied
    __Very satisfied
    __Extremely satisfied

205. Considering your ideal weight, how much do you weigh?
    __More than 25lbs.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.

206. How would you describe yourself?
    __Extremely underweight
    __Underweight
    __Average
    __Overweight
    __Extremely overweight

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

207. Drinking alcohol makes me feel good.

208. I will never drink or never drank alcohol while underage.

209. Drinking alcohol is a bad habit.

210. Drinking alcohol is not worth the risk to my health.

211. Smoking cigarettes should be legal for people under 18 years.

212. I will never smoke cigarettes.

213. Marijuana should be legalized.

214. I will never smoke marijuana.

215. There is nothing wrong with sniffing things (like glue, markers, or doing whip hits) to get high.

216. I stay away from drugs because I do not want to become addicted.

217. There is nothing wrong with taking over the counter drugs to stay awake to study.

218. When someone is bothering me, they deserve to get punched.

219. I carry a weapon to feel safe.

220. I carry a gun or a knife for protection.

221. Hitting, punching, or other violent acts make me feel good.

222. It's OK to fight back if someone is trying to physically hurt me.

223. Violence or physical force is the best way to solve problems.

224. I am never violent with others.

Please indicate the number of times using the following scale, Never, Once, Twice, Three, 4 or more.

225. I have been ticketed/arrested for underage drinking or other alcohol use charge.

226. I have been ticketed/arrested for violence related charges.

227. I have been ticketed/arrested for weapons violations.

228. I have been ticketed/arrested for personal crimes against others.

229. I have been ticketed/arrested for other charges.

Please indicate the frequency of your actions using the following scale, None, 1-7 day, 8-15 days, 16-24 days, 25-30 days.

230. Within the last 30 days, on how many occasions did you do the following:
    Have an alcoholic drink?

Have 3 or more alcoholic drinks in one day?
Smoke a cigarette?
Smoke 3 or more cigarettes in one day?
Smoke a marijuana joint?
Smoke 3 or more marijuana joints in one day?
Sniff something (like glue, markers, or doing whip hits) to get high?
Sniff a substance 3 or more times in one day?
Use an illegal substance to get high?
Use a sleep preventive drug to stay awake?
Use a sleep aid to go to sleep?
Diet?
Food binge?
Induce vomiting after eating?
Take laxatives?
Commit a violent act?
Victim of violence?
Carry a weapon?
Witness violence?
Witness the destruction of property?
Participate in the destruction of property?
Stopped by police for traffic violations?
Stopped or picked up by police for questioning?
Convicted of a crime?
Take something from a store without paying for it?
Skip a class?
Lie to a person in authority?
A willing sex partner?
Practiced safe sex measures?
Play the lottery?
Place bets on sports events?
Gamble on the computer?
Visit casinos in order to gamble?
Purchased an item with a credit card?
Contacted regarding a delinquent payment?

Use the following scale to 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?

232. How old were you when you first had your first drink?

233. How old were you when you first became sexually active?

Please use the following scale to 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?

235. What is the largest amount of money you've ever won gambling?

Please use the following scale to note the monetary amount, $0, $1-$1000, $1000-$2500, $2501-$5000, More than $5000:

236. How much money have you borrowed to finance your education?

237. What is the combined balance due on your credit card?

Please use the following scale to note the amount, 0, 1-2, 3-4, 5-6, 7 or more:

238. How many credit cards do you have?

239. How many delinquent payments have you made on your credit card?

240. How many times have you been denied credit or had a service discontinued to non or delinquent payments?

Please use the following scale to 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
     Oral reports and presentations
     Papers
     Being called on in class
     Money issues
     Significant other
     Roommate
     Getting fired from work
     Unplanned pregnancy
     Being arrested
     Being caught cheating

Please use the following scale to rate the frequency of activity, Never, Hardly ever, Often, Most times, Always:

242. How do you handle stress?
    Eat
    Exercise/run/take a walk
    Drink alcohol
    Smoke
    Pray
    Sleep

243. How many hours of sleep do you average per night?
    __1-3
    __3-4
    __5-6
    __7-8
    __>8

244. If I had to start my college career over, I would still choose to attend:
    __Definitely not
    __Probably not
    __Don't know
    __Probably yes
    __Definitely yes

Use the following scale to answer the following questions, Very dissatisfied, Not satisfied, Satisfied, Very satisfied, Extremely satisfied:

245. What is your satisfaction with the campus experience?

246. What is your satisfaction with the community?

247. What is your satisfaction with the overall college experience?

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

Appendix C

Items Reverse Coded

Variable	Item Number	Question
Ext40	40	I have sometimes felt pressured to attend religious services different from my own faith since enrolling at MSU.
Ext10	10	I have felt put down or been embarrassed by my professors at MSU.
Ext12	12	My Family doesn't care if I smoke.
Ext13	13	My family doesn't care if I drink.
Ext28	28	MSU rarely enforces its rules for student behavior.
Ext 29	29	It's okay to break MSU rules.
Ext30	30	I worry that I will get into trouble due to my behavior here on campus.
Ext6	6	How many of your friends have been in trouble with the law.
Ext16	16	My friends don't care if I drink alcohol.
Ext17	17	My friends don't care if I smoke cigarettes.
Ext35	35	I usually just go along with what my friends tell me to do.
Ext56	56	My friends smoke cigarettes.
Ext57	57	My friends do/use illicit drugs.
Ext58	58	My friends smoke marijuana.
Ext60	60	My friends drink alcohol.
Int195	195	I often feel unhappy, sad or depressed.
Int197	197	I often feel lonely.

Int99	99	It bothers me when I don't do something well.
Int194	194	I can name three things at which I'd like to be better.
Int88	88	I have cheated on **exams** since coming to MSU.
Int123	123	To get ahead, sometimes you have to lie, steal or cheat.
Int128	128	I am likely to cheat in class to get a better grade.
Int125	125	Sometimes I bend the truth so I can get ahead.
Int98a	98a	How often do you participate in activities that are considered illegal?
Int98b	98b	How often do you participate in activities that are considered dangerous?
Int98c	98c	How often do you participate in activities that are considered hurtful?
Int136	136	I act without stopping to think.
Int134	134	I have trouble fitting in with others.
Int135	135	I like to be alone.
Int199	199	I have trouble fitting in with others.
Int164	164	Most of the time, I try to make friends with people from the same ethnic background as myself.
Int170	170	All ethnic/racial groups living in the United States should practice American values and beliefs.
Int171	171	Sometimes I wish I could be a part of some other racial/ethnic group.
Int142	142	I often feel like beating or injuring someone.

Int143	143	I have temper outbursts I can't control.
Int144	144	I frequently get into arguments.
Int189	189	When someone is angry with me, I will avoid them at all costs.
Int70	70	I would accept a poor grade before dropping a class.
Int71	71	I have received a 1.0 or lower in one or more classes.
Int89	89	I have pragiarized other works in my term papers since coming to MSU.
Int94	94	I cram for exams the night before.
Int79	79	I leave classes early.
Int80	80	I arrive late to class.
Int81	81	I fall asleep in class.
Int82	82	I come to class drunk or high.
Int110	110	At this time, college is not that important to me.

Appendix D

Items Excluded from Analysis Due to a Lack of Variability

Variable	Item Number	Question	Frequencies
Ext7j	7j	How often do you speak with you landlord about important issues, concerns, or your future?	Never 92.2% Seldom 4.7% Sometimes 1.4% Frequently .6% Always .2%
Ext71	71	How often do you speak with MSU police about important issues, concerns, or your future?	Never 92.9% Seldom 5.3% Sometimes 1.1% Frequently .2% Always 0.0%
Int69	69	I am involved in university government.	No 91.5% Yes 8.3%
Int74	74	I have ready access to a computer with modem.	No 6.8% Yes 93.0%
Int75	75	I check my e-mail daily for messages.	No 5.6% Yes 94.2%
Int82	82	I come to class drunk or high.	Never 92.7% Seldom 4.2% Sometimes 1.8% Frequently .9%

			Always .3%

Appendix E

MSUSAS List of Asset Categories, Assets, and Survey

Questions: Original model

Asset Category	Question	Item Number
Support		
Other adult relationships	Other than your parents, how many adults do you access for advice and support?	3
Other adult relationships	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	7
Caring school climate	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. IM's: 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	8
Caring School climate	I have felt put down or been embarrassed by my professors at MSU	10

Caring community	Overall, MSU provides a caring and encouraging environment	9
Caring community	East Lansing residents make me feel a welcome part of the community.	41
Caring community	East Lansing landlords, leasing companies, or apartment managers make me feel a welcome part of the community.	42
Caring community	I feel my needs are met by the social systems at work in my community of residence as a student	43
Caring community	I care about the community of East Lansing	45

Empowerment

Young adults as resources	I am given lots of opportunities to make the East Lansing community a better place	46
Young adults as resources	I am given lots of opportunities to make the MSU community a better place	47
Young adults as resources	Are you registered to vote?	51
Young adults as resources	Are you registered to vote in East Lansing	52
Safety	As a whole, I feel safe while on campus	48
Safety	I feel safe walking in the East Lansing community after dark	49
Safety	As a student, where would you prefer to live while attending MSU	50
Community values youth	MSU students have clear and respected roles as members of the East Lansing community	44
Community values youth	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	53

95

Service to others	Helping others is important to my friends	36
Service to others	Helping other people is important to me	37

Boundaries and expectations

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

Positive peer influence	My friends drink alcohol	60
Constructive use of time		
Religious community	Being spiritual or religious is important to me	38
Religious community	I regularly attend religious activities	39
Religious community	I have sometimes felt pressured to attend religious services different from my own faith since enrolling at MSU	40

Constructive use of time	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?
		54

Constructive use of time	How many hours per week do you work?	55
Constructive use of time	I effectively balance school, work, family, friends, and fun	64

Constructive use of time	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
		65

Creative	I regularly participate in	61

activities	structured extracurricular activities, e.g. music, dance, or art	
Young adult programs	I participate in dorm/residence hall sponsored activities	62
Young adult programs	I participate in Greek sponsored activities	63

Family and peer support

Parental support	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	1
Family support	I can go to adult family members for help and support when I need it	11
Positive family communication	How frequently do you communicate via phone, mail, or in person with your parents while in school?	2
Peer support	How many close friends do you have?	4
Peer support	How many of your close friends attend MSU with you?	5
Peer support	I relate well to my peers	14
Peer support	My friends are a very important part of my life	18
Peer support	I feel my friends listen to me	19
Peer support	My friends and I are supportive of each other during difficult times	20
Peer support	My friends care about me	22
Family boundaries	My family doesn't care if I smoke	12
Family boundaries	My family doesn't care if I drink	13
Family boundaries	In my family there are clear rules about what I can and cannot do	23
Family boundaries	My parents made clear what is expected of me while in college	24
Family boundaries	My parents trust me to follow their values while I am away at college	25

Commitment to learning

Achievement motivation	My summer employment is related to my declared major	66
Achievement motivation	My employment during the school year is related to my declared major	67

Achievement motivation	I plan to study abroad for at least one semester	68
Achievement motivation	I would accept a poor grade before dropping a class	70
Achievement motivation	I have received a 1.0 (D) or lower in one or more classes	71
Achievement motivation	I have spent one or more semesters on the Dean's List	72
Achievement motivation	I like my chosen major, or the major I am considering	111
Achievement motivation	There are plenty of jobs available in my major	112
Achievement motivation	It is important to my parents that I do well in college	113
Achievement motivation	If I received a low grade my parents would be upset	114
Achievement motivation	It bothers me when I don't do something well	99
Achievement motivation	I am aware of the education or training needed for my career options	100
Achievement motivation	I will need a post baccalaureate degree or specialization certificate to qualify for gainful employment in my field of study	104
Achievement motivation	I own a computer	73
Study habits	I complete all class readings before class sessions	78
Study habits	I have ready access to a computer with modem	74
Study habits	I check my email daily for messages	75
Study habits	I check my papers before submitting	83
Study habits	I adequately prepare for exams and presentations	84
Study habits	I have plagiarized other works in my term papers since coming to MSU	89
Study habits	I cram for exams the night before	94
Study habits	I regularly set aside specific blocks of time to study	96
Study habits	I learn best with study groups	97
Learning engagement	I read the newspaper or other non-class materials during class	76
Learning engagement	I attend all class sessions	77
Learning	I leave classes early	79

99

engagement		
Learning engagement	I arrive late to class	80
Learning engagement	I fall asleep in class	81
Learning engagement	I come to class drunk or high	82
Learning engagement	I complete my assignments on time	87
Learning engagement	I speak up/out in class	90
Learning engagement	I lead class discussions	91
Learning engagement	I visit faculty during school hours	92
Learning engagement	I send email to faculty	93
Learning engagement	I tutor other college students	95
Learning engagement	I am provided with challenging and supportive courses	101
Learning engagement	I plan to continue my schooling after I receive my Bachelor's degree	102
Learning engagement	It is important for me to complete an internship before I graduate	103
Learning engagement	It is important for me to have student membership in at least one professional organization	105
Learning engagement	I think university required classes are important	109
Learning engagement	At this time, college is not that important to me	110
Bonding to school	I am involved in university government	69
Bonding to school	Overall I enjoy college	106
Bonding to school	I like college for the academics	107
Bonding to school	I like college for the social atmosphere	108

Positive values

Caring	What friends go through hard times, I talk to them about how they feel	119
Equality and social justice	I respect other people's personal and civil rights	115

100

Equality and social justice	It is important that I support equal rights and opportunities for all people	116
Equality and social justice	I respect other people's ways of looking at things, their lifestyles and their attitudes	117
Equality and social justice	When asked, I can explain why belief systems are "fair" and "not fair"	121
Integrity	I have cheated on exams since coming to MSU	88
Integrity	I make decisions based on what I believe	122
Integrity	To get ahead, sometimes you have to lie, steal, or cheat	123
Integrity	I stand up for what I believe when it is unpopular to do so	124
Integrity	I am likely to cheat in class to get a better grade	128
Honesty	Sometimes I bend the truth so I can get my way	125
Honesty	I tell the truth even when if is not easy	126
Responsibility	I accept responsibility for my actions when I make a mistake	127
Restraint	How frequently do you participate in activities that are considered illegal, dangerous, and/or hurtful	98

Social competencies

Planning and decision-making	I act without stopping to think	136
Planning and decision-making	I am good at learning from my mistakes	137
Planning and decision-making	I choose my words carefully before I speak	148
Planning and decision-making	I consider all sides of the situation before making decisions	157
Planning and decision-making	I consider possible consequences before choosing to act	158
Planning and decision-	I am good at planning ahead	162

making		
Interpersonal competence	I consider other people's feelings when making decisions	118
Interpersonal competence	I work well by myself	85
Interpersonal competence	I work well with others	86
Interpersonal competence	I enjoy being with other people	132
Interpersonal competence	I avoid getting involved with others	133
Interpersonal competence	I have trouble fitting in with others	134
Interpersonal competence	I like to be alone	135
Interpersonal competence	It is important that I not upset people when I talk with them	151
Interpersonal competence	I talk over problems with a friend	152
Interpersonal competence	I listen to others and ask them questions about what they've said	154
Interpersonal competence	I make friends easily	159
Interpersonal competence	I am comfortable initiating conversations with strangers	160
Interpersonal competence	I believe I am popular among other students	179
Interpersonal competence	I can get along with members of the opposite sex	180
Interpersonal competence	I have trouble fitting in with others	199
Communication competence	When I talk I usually get what I want	147
Communication competence	I get my point across when I talk with people	149
Communication competence	I clearly present my ideas to groups of people	155
Communication competence	I express my ideas well in writing	156
Communication competence	I have been called a good listener	161
Cultural competence	When I talk with people I make sure not to offend them	150
Cultural competence	I am good at interpreting non-verbal communication	153
Cultural	I hang out with people from	163

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

Peaceful conflict resolution	I can keep a cool head in emergencies	140
Peaceful conflict resolution	I often feel like beating or injuring someone	142
Peaceful conflict resolution	I have temper outbursts I can't control	143
Peaceful conflict resolution	I frequently get into arguments	144
Peaceful conflict resolution	I would rather discuss a problem with someone instead of hitting or avoiding them	186
Peaceful conflict resolution	When I am in an argument, I try to listen to the other person's point of view	187
Peaceful conflict resolution	If someone is angry with me, I will go to him/her and ask about it in a calm manner	188
Peaceful conflict resolution	If someone is angry with me, I will avoid him/her at all costs	189

Positive identity

Personal power	I feel capable of coping with most of my problems	138
Personal power	I can describe the qualities I want in a long term relationship	145
Personal power	I can turn down a sexual advance if I'm not interested	146
Personal power	I ask for help with I need it	190
Personal power	I can explain how I am feeling (e.g. angry, happy, worried, or depressed)	191
Personal power	I often feel unhappy, sad, or depressed	195
Personal power	I often feel sure of who I am (what kind of person I am)	196
Personal power	I often feel lonely	197
Self esteem	Overall, my father was a constant and influential presence in my life	129
Self esteem	Overall, my mother was a constant and influential presence in my life	130
Self esteem	I feel part of a group of friends	131
Self esteem	It bothers me when I don't do	99

	something well	
Self esteem	I consider criticism without being very angry, sad or defensive	192
Self esteem	I can name three or more good things about myself	193
Self esteem	I can name three things at which I'd like to be better	194
Self esteem	I often feel satisfied with myself the way I am	198
Sense of purpose	My life has purpose	200
Positive view of future	I see the humor in life even when things are not going well	141
Positive view of future	I feel I can bounce back quickly from bad experiences	139
Positive view of future	I am optimistic about my future	201

Appendix F

Reliability statistics for asset scales

Scale: Religious Community

Item	Corrected Item Total Correlation
#38	0.64
#39	0.64

N=1077

Scale: Constructive Use of Time

Item	Corrected Item Total Correlation
#65B	0.36
#65C	0.47
#65D	0.42

N=1083
Alpha=.60

Scale: Young Adults as Resources

Item	Corrected Item Total Correlation
#46	0.55
#47	0.55

N=1073

Scale: Community Values Youth

Item	Corrected Item Total Correlation
#53A	0.63
#53B	0.63
#53C	0.64
#53D	0.53
#53E	0.63
#53F	0.47
#53G	0.69
#53H	0.7

N=1062
Alpha=.86

Scale: Safety

Item	Corrected Item Total Correlation
#48	0.56
#49	0.56

N=1078

Scale: Service to Others

Item	Corrected Item Total Correlation
#36	0.43
#37	0.43

N=1079

Scale: Family Boundaries

Item	Corrected Item Total Correlation
#23	0.47
#24	0.43
#24	0.33
#12	0.35
#13	0.3

N=1022
Alpha=.62

Scale: Parental Support

Item	Corrected Item Total Correlation
#1A	0.82
#1B	0.84
#1C	0.89
#1D	0.88
#1E	0.85

N=1083
Alpha=.95

Scale: Peer Support

Item	Corrected Item Total Correlation
#14	0.49
#18	0.59
#19	0.6
#20	0.56
#22	0.57
#4	0.49
#5	0.37

N=1077
Alpha=.77

Scale: Other Adult Relationships

Item	Corrected Item Total Correlation
#3	0.29
#7B	0.39
#7C	0.53
#7D	0.54
#7E	0.43
#7F	0.48
#7G	0.6
#7H	0.58
#7I	0.46
#7K	0.39
#7M	0.48

N=1083
Alpha=.80

Scale: Caring School Climate

Item	Corrected Item Total Correlation
#8B	0.29
#8C	0.22
#8D	0.5
#8E	0.57
#8F	0.23
#8G	0.51
#8I	0.35
#8J	0.36
#8K	0.49
#8L	0.31

N=1083
Alpha=.72

Scale: Caring Community

Item	Corrected Item Total Correlation
#9	0.36
#41	0.53
#42	0.42
#43	0.49
#45	0.32

N=1071
Alpha=.67

Scale: School Boundaries

Item	Corrected Item Total Correlation
#26	0.33
#27	0.34
#28	0.23
#29	0.31

N=995
Alpha=.50

Scale: Positive Peer Influence

Item	Corrected Item Total Correlation
#34	0.46
#16	0.56
#17	0.51
#56	0.66
#57	0.6
#58	0.66
#60	0.66
#6	0.48

N=939
Alpha=.83

Scale: Community Boundaries

Item	Corrected Item Total Correlation
#31	0.29
#33	0.29

N=1073

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Scale: Integrity

Item	Corrected Item Total Correlation
#88	0.34
#123	0.39
#128	0.53
#122	0.28
#124	0.27

N=1057
Alpha=.60

Scale: Honesty

Item	Corrected Item Total Correlation
#126	0.26
#125	0.26

N=1059

Scale: Responsibility

Item	Corrected Item Total Correlation
#98A	0.54
#98B	0.65
#98C	0.45

N=817
Alpha=.71

Scale: Equality and Social Justice

Item	Corrected Item Total Correlation
#115	0.64
#116	0.64
#117	0.64

N=1074
Alpha=.79

Scale: Self Esteem

Item	Corrected Item Total Correlation
#129	0.26
#130	0.37
#131	0.35
#192	0.2
#193	0.46
#194	0.27
#198	0.3

N=1063
Alpha=.59

Scale: Positive View of Future

Item	Corrected Item Total Correlation
#139	0.39
#141	0.35
#201	0.27

N=1075
Alpha=.52

Scale: Personal Power

Item	Corrected Item Total Correlation
#138	0.32
#145	0.26
#146	0.16
#190	0.3
#196	0.32
#195	0.48
#197	0.38
#191	0.38

N=1065
Alpha=.63

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Scale: Cultural Competence

Item	Corrected Item Total Correlation
#150	0.23
#153	0.22
#163	0.5
#165	0.57
#166	0.5
#167	0.45
#168	0.55
#169	0.29
#170	0.23
#164	0.32

N=986
Alpha=.71

Scale: Peaceful Conflict Resolution

Item	Corrected Item Total Correlation
#140	0.2
#186	0.45
#187	0.42
#188	0.45
#142	0.4
#143	0.49
#144	0.38
#189	0.27

N=1065
Alpha=.68

Scale: Cultural Identity

Item	Corrected Item Total Correlation
#172	0.49
#173	0.54
#174	0.3
#175	0.56

N=1071
Alpha=.68

Scale: Resistance Skills

Item	Corrected Item Total Correlation
#176	0.39
#181	0.53
#182	0.63
#183	0.52
#184	0.55
#185	0.49

N=1067
Alpha=.77

Scale: Planning and Decision Making

Item	Corrected Item Total Correlation
#136	0.35
#137	0.33
#148	0.4
#157	0.45
#158	0.54
#162	0.3

N=1075
Alpha=.65

Scale: Communication Competence

Item	Corrected Item Total Correlation
#147	0.28
#149	0.47
#155	0.48
#156	0.35
#161	0.27

N=1074
Alpha=.60

Scale: Interpersonal Competence

Item	Corrected Item Total Correlation
#132	0.46
#159	0.7
#160	0.44
#179	0.49
#134	0.6
#199	0.61

N=1063
Alpha=.79

Scale: Study Habits

Item	Corrected Item Total Correlation
#78	0.35
#83	0.38
#84	0.48
#96	0.18
#94	0.23

N=946
Alpha=.56

Scale: Bonding to School

Item	Corrected Item Total Correlation
#106	0.58
#107	0.33
#108	0.39

N=1074
Alpha=.61

Scale: Acheivement Motivation

Item	Corrected Item Total Correlation
#111	0.34
#112	0.32
#113	0.43
#114	0.22
#99	0.27
#100	0.33

N=1070
Alpha=.56

Scale: Learning Engagement

Item	Corrected Item Total Correlation
#77	0.23
#87	0.21
#90	0.36
#91	0.37
#92	0.47
#93	0.39
#101	0.26
#102	0.29
#103	0.2
#105	0.32
#110	0.25

N=1053
Alpha=.65

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