SELF-DEFINITION AND COLLEGE ADAPTATION IN STUDENTS FROM THE RONALD E. MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM

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Thesis Prepared for the Degree of

MASTER OF SCIENCE

UNIVERSITY OF NORTH TEXAS

December 2015

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Vance, Jeffrey Michael. *Self-Definition and College Adaptation in Students from the Ronald E. McNair Postbaccalaureate Achievement Program.* Master of Science (Psychology), December 2015, 58 pp., 21 tables, 2 illustrations, references, 45 titles.

While a great deal of psychological research is conducted on college students, less has been done on their adaptation to college. These young adults, as they develop ego identity and differentiate themselves from parents and families, must adjust to the social and academic environment of college. Psychosocial adjustment predicts college retention better than academic predictors do. First generation college students face greater than typical challenges adapting to college. The Ronald E. McNair Post-Baccalaureate Achievement Program exists to aid first generation, lower income undergraduate student who wish to pursue a doctoral degree. Self-definition scored from thematic apperceptive technique stories reflects an individual’s relative freedom from social role constraint. This study examined the role of self-definition and familial understanding and acceptance in this population as predictors of successful adaptation to college. While neither was found to be a significant predictor, family understanding and acceptance was found to be a more defining characteristic of this sample than was self-definition. This suggests that when social support is sufficient, individuals do not need to rely on self-definition.
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ACKNOWLEDGEMENTS

Appreciation is extended to the Ronald E. McNair Post-Baccalaureate Achievement Programs from the various institutions that allowed us to recruit participants from their students. Thanks to the Self Definition scorers, Mikayla Wynter, Zara Baker, Amanda Vela, and Joshua Payberah. Gratitude is also expressed to Sharon Rae Jenkins for her mentorship, as well as my committee members Randall J. Cox and Adriel Boals. Finally, thank you to Theresa Vance for proofreading and immeasurable intangible support.
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SELF-DEFINITION AND COLLEGE ADAPATION IN STUDENTS FROM THE RONALD E. MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM

While a great deal of psychological research is conducted on college students, less has been done on their adaptation to college. Failure to adapt successfully to college may be manifested academically in the form of declining grades, sometimes resulting in withdrawal from college. Even with academic success, students may leave school if they fail to adapt to situations such as separation from one’s family, increased independence and responsibility, and the need to build a social network from scratch. This is important because non-academic factors predict graduation rates better than academic success or failure (Berger & Milem, 2000; Schuh, 1999; Sparkman, Maulding, & Roberts, 2012). As they develop ego identity and differentiate themselves from parents and families, these young adults must adjust to the social and academic environment of college. A key developmental task at this stage is assuming responsibility for one’s self (Arnett, 1998). This, and frequently geography, removes them from the influence and direct support of their parents. At this point the quality of parental attachment and an authoritative parenting style fosters autonomy and aids the student in thriving independently from their parents (Crede & Niehorster, 2012). Crede and Niehorster’s meta-analysis supported the argument that adjustment to college is multidimensional and that students may adjust poorly to one component and well to another.

Furthermore, first generation college students often face additional challenges adjusting to college. The McNair Scholars Program attracts first generation college students who are academically driven. The students, while academically disciplined, are less prepared to adapt to
elements of college life. This is consistent with the author’s findings in a study of McNair Scholars who tended to adjust well above norms in academics, but fell below norms in other areas. In particular, personal and emotional adjustment was below the normative sample, as was social adjustment (Vance, Gonzalez, & Jenkins, 2012). Personality factors may enable some individuals to acclimate to a novel college environment better than others. Therefore this paper examines student adjustment to college, specifically the role self-definition plays for students in the McNair Scholars Program as they adapt to university life.

Literature Review

Adjustment to College

A student’s adjustment to college can relate to retention in either a direct or mediated path. In the mediated path poor adjustment leads to poor academic performance which leads to withdrawal, whether initiated by the student or the institution. Of course, students may choose to withdraw for nonacademic reasons, which may be a more frequent cause (Crede & Niehorster, 2012). The Student Adaptation to College Questionnaire (SACQ) looks at four domains of adjustment to college: academic adjustment, social adjustment, personal – emotional adjustment, and institutional attachment (Baker and Siryk, 1999). Citing Taylor and Pastore’s (2007) study questioning the factor structure of the SACQ, LaBrie, Ehret, Hummer, and Prenovost (2012) created a two factor subscale structure for the SACQ of positive and negative adjustment. Using this they found negative college adjustment to be associated with higher alcohol consumption, particularly for women. However they also found that positive college adjustment functioned as a moderator, lessening the negative consequences of drinking
Labrie et al. (2012) posited that poor college adjustment is a significant factor as to why 50% of students who start college leave before earning a degree.

High school GPA and standardized tests predict college GPA, but not completion (Schuh, 1999). Most institutions conduct their own research on retention and these results are not published (Barefoot, 2004). Sparkman, Maulding, and Roberts (2012) investigated the emotional intelligence factors that may predict college retention. They included “making new relationships, adjusting existing relationships, learning to study, and dealing with independence” (p. 645). Contact with professors and other campus professionals as well as campus involvement increased the likelihood that students will make a successful transition from high school to college (Berger & Milem, 1999).

Those students who graduated, withdrew, or were currently enrolled differed primarily on the emotional intelligence variables of Empathy, Social Responsibility, Flexibility, and Impulse Control (as measured by the Bar-On EQ – I, 2004). Empathy was defined as “the ability to be aware of, to understand, and to appreciate the feelings of others” (Bar-On, 2004, p. 16). Social Responsibility, the strongest predictor of graduation, was defined as “the ability to demonstrate oneself as cooperative, contributing, and constructive member of one’s social group” (Bar-On, 2004, p. 16). This may be related to contributing to a field of knowledge, which marks the transition from student to scholar. Flexibility, the only one negatively related to graduation, was defined as “the ability to adjust one’s emotions, thoughts, and behavior to changing situations and conditions” (Bar-On, 2004, p. 16). Perhaps the most flexible subjects did not see a college education as the only path to career success. Impulse Control was defined
as “the ability to resist or delay in impulse, drive, or temptation to act” (Bar-On, 2004, p. 16).

This would include resisting the temptation to quit in the face of hard work or, specifically for first-generation students, the strain on one’s resources.

Crede and Niehorster (2012) conducted a meta-analysis of studies using adjustment to college as both an outcome of various predicting variables as well as a predictor of retention and GPA. Not surprisingly, Conscientiousness was strongly related to academic adjustment as were Agreeableness and Extroversion. Neuroticism was negatively related to all four adjustment constructs. Self-esteem exhibited the strongest relationship to overall adjustment, followed by internal locus of control. Depression was related to poor personal – emotional adjustment and stress was strongly related to poor overall adjustment to college (Crede & Niehorster, 2012).

In general, trait variables such as self-esteem, self-efficacy, internal locus of control, and conscientiousness, along with social support, have the strongest association with adjustment to college life. One limitation of these studies includes the timing of these measures where studies administered early to first semester freshman would naturally show lower adjustment than those administered at higher grade levels (Crede & Niehorster, 2012). Another limitation is that many of these measures may be subject to social desirability bias.

Social support in general and specifically from one’s parents and family was related to adjustment overall and to all four types of adjustment. For emerging adults, family conflict is also linked to adjustment to college (Johnson et al., 2010). Four types of psychological separation from one’s parents were identified by Hoffman (1984). Conflictual independence is
freedom from guilt, anger, and resentment. Functional independence is the ability to manage the practical aspects of life without help from one’s parents. Attitudinal independence is maintaining values and beliefs different from one’s parents. Emotional independence is when the need for emotional support and approval is at an appropriate level. All of these have been proposed as possible predictors of college adjustment, with conflictual independence having a small but positive relationship to college adjustment (Crede & Niehorster, 2012). Three of the four independence types (Emotional, Attitudinal, and Functional) had close to zero relationship to college adjustment. This may be because most individuals begin developing their independence during their precollege teenage years.

Relationships to high school friends assisted in the adaptation to college during the first few weeks, however, later in the first semester, having college friends was more adaptive (Swenson et al., 2008). While family and high school peer support are both important, first-generation college students’ friends and families often lack direct college experience and for this population college peer support has been demonstrated to be more important (Dennis et al., 2005). It is interesting to note however, that by far the strongest relationship between social support and adjustment to college is support from faculty and the institution (Crede & Niehorster, 2012).

While the predictive validity of general adjustment to college for college GPA was almost as strong as that of SAT scores and high school GPA, Crede and Niehorster (2012) found that institutional attachment had the strongest relationship with retention followed closely by social adjustment. Academic adjustment and personal-emotional adjustment were related but
not as strongly. However, several measurement challenges must be considered: 8 out of 15 items on the SACQ Attachment scale are shared with the 20 items in the Social adjustment scale. The Attachment scale shares only 1 item with the Academic scale. The Personal-Emotional scale shares no items with any other scale. Also some of the items on the SACQ Attachment subscale directly assess the intention to remain in or leave the institution, which constitutes criterion contamination when used as a predictor of remaining in or leaving an institution. Another limitation of this relationship is that most studies evaluated retention over a relatively short time (i.e. less than one year) (Crede & Niehorster, 2012).

The student most likely to graduate is a white female, who lives on campus her first semester, is not dating, and has at least one parent with a four-year degree. First-generation college students may take longer to graduate due to lower financial resources thus the need to spend more time working to support themselves. These students may also lack emotional support due to their families not understanding the level of commitment necessary for a student to complete a college education. These students may take lighter academic loads or drop out seeking the financial resources they need; making a timely graduation unlikely (Sparkman, Maulding, & Roberts, 2012).

First Generation College Students

Demographic characteristics are frequently thought of as influencing adjustment. First-generation status is one of these, as well as socio-economic status, age, ethnic minority status, disabled students, and divorced status of the family. Of these, socio-economic status, older students, and ethnic minority status are common among first-generation students (Crede &
Niehorster, 2012). First-generation college students are also more likely than traditional students to report lower SAT scores and to speak a language other than English at home (Bui, 2002). This commonality makes experimentally isolating demographic predictors problematic.

First-generation college students are less likely than those whose parents went to college to complete a four-year college degree, even when the first generation students were high achieving in high school (Hudley et al., 2009). A possible reason for this is that lower socioeconomic status (SES) and first generation college students are often concentrated in community colleges rather than four year institutions (Brock, 2010). Still, once enrolled in a four year institution, lower SES and parents’ lack of college education predict lower GPAs and retention rates (Kennet and Reed, 2009; Martinez et al., 2009). However, once a student is successful in a four year university, parent’s education level and SES do not predict continuation to graduate school (Mullen et al., 2003, Stolzenberg, 1994). The higher standards of four-year institutions may result in systematic differences between the first generation students in these colleges as opposed to those in two-year institutions (Bui, 2002). Nonetheless, successfully completing a four year degree may a key element enabling first-generation college students to seek graduate education.

Some impediments to success in a four year institution are financial. First-generation college students were more likely to worry about financial aid than their peers (Bui, 2002). The first generation students were more likely to rely on scholarships, grants, and loans and less likely to rely on parent’s contribution and savings to pay for college. They were more likely to work both part-time and full-time than students with college educated parents (Martinez, Sher,
Krull, and Wood, 2009). Working full-time jobs strongly correlates to attrition (Billson & Terry, 1982). Full time work may interfere with institutional involvement, which may thus be a mediator of why a full-time job is associated with attrition.

Another factor impacting college completion is academics. First-generation college students felt less prepared, were more worried about falling behind academically, and felt they had to spend more time studying than their peers did (Bui, 2002). First-generation students tended to have lower college GPAs than their counterparts. Using Baron and Kenny’s (1986) model, low college GPA mediated, at least partially, the relationship between parent’s education level and college attrition. However, GPA also acted as a moderator to interact with parental education as a predictor of leaving college. That is to say lower GPA was more likely to lead to attrition for first-generation students than for their peers (Martinez, et al., 2009).

Social adjustment may be another contributor to the failure to complete a four year degree. First-generation college students reported feeling less familiar with the college environment (Bui, 2002). For example, Bui (2002) noted that first-generation college students may be less prepared for social events that encourage substance abuse yet Martinez, et al. (2009) found that first-generation students tended to drink less heavily than their peers.

Martinez, Sher, Krull, and Wood (2009) looked at mediators and moderators of attrition in first-generation college students. They noted that college GPAs acted as both a moderator and mediator of attrition by ACT scores. Scholarships and loans appeared to lower attrition rates, while full-time work seemed to raise attrition rates for first-generation college students. They noted a difference in time-fixed and time-varying variables. Time-fixed refers to the
differences a student brings to college that are typically measured only once (e.g. demographics and high school performance). Time-varying refers to factors that may change during the course of a college career and ideally are measured at multiple points in time (e.g. psychosocial adjustment factors). The key idea is that characteristics (time-fixed factors) may give way to college experience (time-varying factors) over time. Does college experience mediate the association between a characteristic and attrition, or moderate the effect of a characteristic on attrition?

The Martinez et al. (2009) study is not without limitations. Most (90.3%) of the participants were white non-Hispanics. First-generation status was determined with a single question “Prior to your 18th birthday, did either of your parents have a college degree?” (Yes/No). Financing was assessed by asking how students were paying for college: scholarships, grants, loans, parents, off-campus job, on-campus job, savings/stocks/bonds, and military benefits (Yes/No). These were entered as covariates where the effect of each form was considered controlling for all other forms of funding (Martinez, et al, 2009). This does not answer the question of whether or not funds are lacking, and thus does not help capture the presence of finance related stress. However, the characteristics the student brings to the university, their impact, and their malleability are worth examining.

Many students enter college bringing with them family expectations. First-generation college students were less likely to report as a reason for going to college that they want to move out of their parents’ home, or because siblings or other relatives were attending college. They were more likely to report as a reason for going to college bringing status or honor to their
family, and helping their family out financially (Bui, 2002). Personality factors have been found to moderate the effect of first generation status on adaptation to college. For locus of control, generational status functioned as a sensitizing factor, increasing the positive effects of internal locus of control and negative effects of external locus of control on adjusting to college for first-generation college students. By contrast, a sensitizing effect of low self-esteem was a risk factor for poor adjustment to college but higher self-esteem was not a predictor of good college adjustment (Aspelmeier et al., 2012).

Families, and the communities in which they live, create social expectations. Where college education is uncommon, one’s social role is unlikely to involve higher education. For example did the parents talk of meeting each other in college or share social elements of the college experience with their children? Do the parent’s careers, and the need for a college education, make an impression on the student? Are the student’s high school peers attending college or entering the workforce? Sometimes for first generation students to aspire to and succeed in college, such students will need to define a social role for themselves independent from that created by their social network. The constructs of self and social definition address the degree to one is free from or constrained by one’s social roles.

*Constructs of Self-Definition and Social Definition*

Self and social definition concepts were derived from Sartre’s (1946/1965) analysis of Jews in the context of anti-Semitism and de Beauvoir’s (1949/1953) research on women’s identity formation in the context of restricting social roles (Stewart, 1992b). Self-definition was introduced by Stewart and Winter in 1974. Most research to this point involving women had
focused on their differences with men, but Stewart and Winter were interested in differences between women. Stewart (1992b) developed the self-definition scoring system assessing the general acceptance of or resistance to social or external definitions. Based on the content of the scoring categories, Stewart and Winter (1974) concluded that the two criterion groups likely perceived and experienced the world differently. For the self-defining woman the world was more orderly. It was organized sequentially. This organization allows purpose driven actions to be effective for the actor. For the socially defined woman the world is less orderly. This disorganization makes the individual more dependent on external influences both concrete (e.g. the weather) and abstract (e.g. fate) (Stewart & Winter, 1974). The Self-definition scoring system assesses a personal style from the narrative rather than the content. This would be manifested across a wide variety of topic domains as opposed to the rather focused domains in which content manifestation can be observed (Stewart, 1992b). Jenkins (1996) specified that self-definition shapes whether one orients more selectively “to internal (self-defining) or external (socially defined) cues” (p. 100). Capturing a stylistic rather than substantive dimension of personality requires an open ended rather than fixed response measure.

*Self-Definition and Social Definition - Criterion Groups*

At the time of their research, a woman’s career orientation was a much better indication of her self-definition than it is today because in the 1960s, the social influences on which career, if any, were appropriate for women were much more clearly delineated. Stewart and Winter asserted this to be the best single characteristic to indicate that a woman was functioning “free of social role ascriptions” (p. 239). For their study “career” was defined by two
questions. “Can an unmarried woman, with no other financial means, support herself with this career?” “Can a man, or do some men, support themselves (and possibly dependents) with this career?” (p. 240). Their other key differentiation was between these careers and those traditionally acceptable for women (secretary, nurse, school teacher) where duties were typically under the direction of a traditionally men’s career (boss, doctor, principal). Thus, women at this time planning a career in a traditional man’s field were deemed to be more self-defining and less defined by social role influences (Stewart & Winter, 1974).

Using criterion groups based on women’s career orientation, an empirically derived scoring system for the Thematic Apperception Test was created. After the scoring system was derived it was cross validated with a different sample and behavioral correlates were studied. The resulting scoring system identified categories of the relatively self-defined (causality, reason-action sequence) and the relatively socially defined (no causality, mental state ending, higher power intervention, ineffective actor). (Higher power intervention was removed after the cross validation phase.) In short, the career oriented group tended to tell stories with causes for events being specified and ending with instrumental action. The non-career oriented group tended to tell stories relating thoughts or feelings without action. The cross validation study used four criterion groups of women, those planning: typically men’s careers, typically women’s careers, brief careers before marriage, and marriage and family without careers. The study found a similar trajectory from self to socially defined women aligning with the career orientation groups (Stewart & Winter, 1974).
Stewart & Healy (1989) proposed a stage model of how social events contribute to individual development. In the childhood and early adolescence phase fundamental values, expectations, and assumptive frameworks are developed primarily from familial influences. In the early adulthood phase, individuals facing opportunities for life choices develop an identity, and for purposes of their study more specifically, a vocational identity. Mature adulthood is characterized by full participation in the labor force and/or family life. The authors noted that this stage is not determined by age but one’s commitment to careers and family life. Later adulthood is characterized by new opportunities in the ability to revise one’s identity (Stewart & Healy, 1989).

The norms learned in the first phase, and thus behavior exhibited by the socially defined persons, are expected to change with both historical shifts and age-related changes in social norms. Supporting the idea of a developmental model, Winter, McClelland, and Stewart, (1981) reported self-definition higher among seniors than first-year students in a variety of different college environments. Self-defining and socially defined individuals should be equally distributed as they develop identities in the second phase. Self-defining persons are expected to arrive at identity achievement by way of active exploration of challenging roles (leadership and family roles) and personally valued goals while socially defined persons achieve identity by seeking harmony with peer social networks and within supportive relationships (Jenkins, 1996).

Stewart & Healy (1989) found that parental influence on an individual’s definition style was greater in the absence of either powerful individual or social historical factors. For example, a strong mentor or shift in cultural norms may be able to exert more influence than
one’s family. Jenkins (1996) noted that by 1981, staying home to raise one’s family had become contemporaneously nontraditional and a more role autonomous choice, thus more self-defining for educated women. Stewart & Healy’s (1989) study was conducted during the 1980s and found that differences in the cohort of women who were college-aged at this time were related to the impact the woman’s movement may have had on their mothers. This demonstrates an interaction of the influence parental and historical factors.

Though the initial research on self definition used only women participants, a few studies produced findings for men. Evidence suggested higher self-definition for both men and women who engage in gender transcendent activities in college (Women in math and science or men in humanities or voluntary service). Wives of men high in self-definition were more likely to have careers, suggesting that for men, too, self-definition is associated with a relative freedom from gender-role definitions (Stewart, 1980; Winter, Stewart, & McClelland, 1977).

Today, a shift in attitudes towards women’s roles is more universal. When considering first-generation college students, demographic shifts in higher education must be considered. College attendance is more normative for today’s generation than it was for their parents. Today’s college campuses are also more ethnically diverse, with a higher immigrant population that they were 20-30 years ago. While making college attendance more likely for first generation students, it does not remove some of their specific challenges. Self-definition may help free first generation students from social expectation of them regarding higher education.
What Self-definition predicts

In her longitudinal study, Stewart (1980) assumed that life pattern predictions for personality or demographic variables alone were overly simplistic and failed to address the complexity of an individual’s life pattern. Stewart (1980) concluded that a woman’s family situation limited her career activity, however, other variables contributed to the variance in life pattern.

Stewart (1980) found that self-definition predicts behavior free from role-constraint independent of family situation. This may manifest itself as an “autonomous” (single or married without children) self-defining woman choosing a “male” career, or a “constrained” (married with children) self-defining woman may eschew the “housewife” role and perform freelance work out of her home (Stewart, 1980). Compare this to first generation college students who may be more likely to be older, married, or have children while pursuing their undergraduate degree. Similar to the “constrained” women of Stewart’s (1980) study, these students seek a college education despite family situations atypical for traditional students.

Self-defining people tend to be more autonomous in relationship to role norms and engage in instrumental thought and actions. Socially defined people tend to adjust to demands, assimilate to role norms, and be more willing to acknowledge distress (Jenkins, 1996). A longitudinal study found that socially defined women were more likely to experience conflict between one’s work and family roles (Jenkins, 1996). While societal changes in regards to women’s careers since this cohort alter the social influence on women’s roles, a socially defined
personal style may still make one more susceptible to role conflict. Jenkins (1996) found that “self-definition was associated with management of multiple roles.”

Stewart & Winter (1974) found self-defining women tended to find more pleasure in activities that exercise their instrumentality. Socially defined women tended to find more pleasure in activities resulting in a positive mental state (e.g. peaceful). Self-defining women find their greatest fears as social problems (e.g. wars, race riots) while socially defined women reported fears of death and harm to themselves. This could suggest that there is a limit to one’s confidence in instrumentality. Perhaps self-defined women were more secure in their ability to affect themselves than they were their ability to affect society. This finding is also consistent with the pattern of self-defining women being more likely to be politically involved. Self-defining women further reported fear of failing an instrumental act as compared to socially defined women fearing being defined a failure by another person or institution (Stewart & Winter (1974).

Stewart (1978) found that women who are more self-defined were more likely to define stress as located outside of themselves and solutions more within themselves. This in turn leads to being more likely to respond with action while not assuming personal responsibility. Jenkins (1996) suggested that these represent thought schemas related to actions of agency in some women and actions of response in others.

*How the Self-Defining “Socialize”*

When a self-defining person’s behaviors involve other people, they are likely to choose social involvement that does not put them to another’s disadvantage in terms of structural
power, thus avoiding vulnerability to social constraints. In contrast, socially defined people may be more willing to ask for assistance while yielding power to another. Self-defined people may however join or create a social system in which they have structural power that supports their sense of self or builds a support system against larger or more powerful social pressures (Jenkins, 1996). Jenkins (1996) asserted that self-defining women would join social subsystems (organizations and families) in which they take active roles to sustaining a personal identity contrary to social norms (Jenkins, 1996).

The Institute of Human Development in Berkeley, California collected stories from the TAT for two longitudinal studies; the Guidance Study (GS) beginning in 1928 and the Oakland Growth Study (OGS) beginning in 1931. These stories have subsequently been scored for self-definition and they help provide some insight on how this may manifest in men. Ten years after they told stories, self-defining men had attained higher social class status than socially defined men. Self-defining men valued intrinsic aspects of job importance more than did socially defined men, both before and after controlling for social class. Self-efficacy and definition style were modestly correlated for men but not women (Jenkins, Allison, & Boyle, 2012; Tse, Love, Leow, Allison, & Jenkins, 2012a; Tse, Love, Leow, Allison, & Jenkins, 2012b; Wright, Jenkins, Harrienger, Davis, & Allison, 2012).

Differences in career aspirations is one reason a student may seek an education level beyond his parents. First generation and lower social economic status college students frequently begin with a cluster of demographic risk factors and socializing with like minded students can strengthen the sense of self efficacy needed to surmount these risks. For these
students who wish to continue to graduate education, the Department of Education offers The Ronald E. McNair Post-Baccalaureate Achievement Program.

**McNair Scholars Program**

Ronald E. McNair was a first-generation college student who earned a Ph.D. in physics from M.I.T. and was a NASA astronaut who died on the Challenger Space Shuttle. The United States Department of Education created the Ronald E. McNair Post-Baccalaureate Achievement Program to honor him. It is a Federal TRIO program which prepares undergraduate students for doctoral studies. The program targets low-income and first-generation college students and reports high retention, graduation, and graduate school placement rates. In 2013 152 colleges and universities featured McNair Scholars programs serving 4,191 Students.

Willison and Gibson (2011) studied the transition into graduate school of 22 McNair scholars. They identified five themes among 14 learning curves; academic readiness, weaving a supportive web, managing the clock, feeling accepted, and staying financially fit. For First Generation, Lower Income (FGLI) students managing the clock and staying financially fit included caring for children at rates higher than for traditional students. Weaving a supportive web, and feeling accepted should relate to social and personal-emotional adjustment. Academic readiness concerns the transition from undergraduate to graduate student. The use of a supportive network of students at one’s college or university may be particularly important when one’s family and pre-college friends are unwilling or unable to provide the type of social support needed for academic success. The ability to transition successfully from a social role
defined by friends and family without college experience to a social role of one’s own choosing may require a degree of self definition.

The McNair Scholars Program can provide a social system that fosters the development of the identity of a scholar. For a socially defined individual whose family, friends, and/or high school fostered the expectation of a college education and a social identification as an educated person, aligning with an academically oriented social structure is perfectly congruent. However, the first generation college student whose socially defined identity is not academic may feel out of place in such an organization. On the contrary, the self-defined individual may embrace the opportunity to select his or her own social network.

*The Current Study*

Success in college has traditionally been defined in terms of academic performance, initially with grade-point average then followed by retention, graduation, and graduate school or career placement. The two primary predictors used in our educational system for success in college are high school academic performance and standardized test scores (SAT or ACT). Research has shown however, that while these predict college GPA, they do not predict retention or graduation rates. For these, psychosocial factors such as institutional attachment, social adjustment, and emotional well-being appear to be much more important contributors. Institutional attachment predicted graduation and transition to graduate school more than all other measures.

As young adults transition into the college environment they develop their own ego identity and independence from their parents. Individuals who went to college and used this
time to form their own futures may regard these years as a time of positive formation. Parents who remember their college years this way may be better equipped to encourage their children to develop their own sense of self than are parents who did not attend college, who are more likely to have responded to their life circumstances in assuming roles in families and careers. These latter parents are not as likely to understand the drive to attend college, nor are they as able to support the children through this transition.

First-generation college students face a number of extrafamilial challenges. They are more likely to have a lower socioeconomic status, and to enroll at a community college rather than 4 year institution. They are more likely to be married, have children, and face other demands on their time such as commuting and working. They are more likely to speak English as a second language, and they are more likely to take longer to graduate. While none of these is unique to first generation students, these students are more likely to have them in combination. So with first-generation college students we see more interaction and moderator effects where predictors (e.g. lower GPA) are more likely to predict non-completion of college for first-generation students than for students whose parents are college educated.

Personality factors likely differentiate those first-generation students who succeed and those who do not. Self-definition is a personality style characterized by a schema embracing the effectiveness of instrumental action. Social definition is a personality style characterized by responding to the environment in ways consistent with one’s social role. For students entering college from an environment where the college student role is typical and embraced, the impact of self-definition would be comparatively minimal. However for those entering the
academic world from environments where college is seen as a departure from social norms, self-definition may be a stronger determinant of success. In the 1960s this was characterized by women seeking education and careers in traditionally male dominated fields. A similar pattern may be predicted with people seeking to become the first in their family to achieve a college education.

Self-definition has been shown to reflect one’s efficacy and coping with certain stressors. For the first generation college student many of the stressors they face will be novel, and their friends and family will lack the experience and expertise to support them through these times. It is at this time that a self-defining schema may provide an additional sense of autonomy and ability and this may increase the student’s capacity to cope.

Parents who attended college are more likely to expect college attendance for their children and achieve a higher socioeconomic status. Higher socioeconomic status, as well as the parent’s social network, often leads to a peer network where college attendance is expected. These all contribute to “college student” being conceived of as a social role and developmental milestone. When coupled with parents and peers valuing education, continuation to graduate is natural (See Figure 1). When parents did not attend college, families do not expect college for their children and are likely to have a lower socioeconomic status. Lower socioeconomic status, as well as the parent’s social network, often leads to a peer network where college attendance is not expected. These all contribute to “college student” being conceived of as departure from expectations and a delay in developmental milestones such as working or beginning a family. When coupled with the increased financial burden of a college education, this often leads to
attrition from college (See Figure 2). For a few first generation students the leap is even greater, aspiration to graduate school. The McNair Scholars Program recruits and encourages first-generation low income college students who ultimately seek doctoral degrees. For these people, their educational aspirations are an even greater departure from the social expectation of their family of origin, increasing the need for freedom from role constraints. Furthermore, families without college experiences are even less equipped to support their children though the transition to graduate school. Thus, they are less likely to understand and accept their aspirations to graduate school. Thus for first generation college students, personality differences such as self-definition are expected to play a stronger role in academic achievement and college adjustment than they do for those for whom a college education was assumed. Given the typically high academic achievement of McNair Scholars, and the better predictive power of non-academic factors, psychosocial adjustment in general and institutional attachment in particular are the best predictors of graduation and continuation to graduate school (Crede & Niehorster, 2012; Sparkman et al., 2012; Vance et al., 2012). The purpose of this study is to examine the role of self-definition in this population as a predictor of successful adaptation to college.

Hypothesis 1: For students in the McNair Scholars program, self-definition scores will be significantly higher than the normal distribution expected from the general college population. [Stewart (1980) reported $M = -.09$, $SD = 3.19$, $N = 100$.]
Hypothesis 2: McNair Scholars higher in self-definition will score higher for the psychosocial domains of college adjustment in general and for institutional attachment in particular as compared to those more socially defined.

Hypothesis 3: McNair Scholars will report significantly more acceptance and understanding from their families of changes in them since entering college than they will for their aspirations for graduate school.

Hypothesis 4: Psychosocial Adjustment and Institutional Attachment will be greater for those students with more family understanding and acceptance of changes since entering college.

Hypothesis 5: Self-definition will be greater for those students with less family understanding and acceptance of their aspirations to graduate school.

Methods

Participants

Participants were recruited from the McNair Scholars Program of six universities in Texas and Oklahoma. A total of 87 students participated, though a few failed to complete every measure used in this study. There were 23 men and 64 women. One participant did not complete the demographic information page but was referred to as “she” by the interviewer of the semi-structured interview. The mean age was 25, the median age was 22, the age range was from 20 to 53, and 15 were greater than 28 years of age. To test for age related differences a binary age variable was created to identify students aged 30 and over (n = 14). Most were unmarried (67) with 14 who were married, and 5 who were separated or divorced. Fifteen
participants had at least one child (See Tables 1 and 2). The sample was ethnically diverse: 42 Latino, 21 Non-Hispanic Anglo, 18 African-American, 4 Asian, 5 American Indian/Alaskan Native, 1 Jewish, 1 Central or South American, 3 mixed (Spanish/Mexican, American Indian/Mexican, Native American/Latino), and 1 selected Other with no explanation. Respondents were allowed to select more than one ethnicity. Participants were grouped in one of four categories to test for ethnic differences: Latino ($n = 39$), Non-Hispanic Anglo ($n = 17$), African-American ($n = 17$), Multi-racial or Other Ethnicity ($n = 13$).

First Generation College Student (FGCS) was defined using the McNair Program standard that neither parent graduated from college. The participants were asked to categorize each parent’s education level as less than H.S., H.S. or GED, Some College, College Grad, or Other (with a blank for explanation). Two fathers and three mothers were coded as other. One mother just had a checkmark, the data was coded as missing (the father was College Grad). One father was entered as “Trade School” (mother was College Grad) and one mother was entered as “Associates” (Father was “Some College”). Both of these were recoded as (3) Some College. One father was listed as “Ph.D.” (mother was High School or GED) and one mother was listed as “M.S. Human Resources” (father was College Grad). Both of these were recoded to (4) College Grad. All of these were likely underrepresented minorities of individuals whose parents graduated after the student entered the McNair Scholars Program. These items were then recoded into a binary status for each parent as BIMOMEDUC and BIDADEDUC, then summed with $n = 69$ defined as FGCS, nine where one parent graduated college, and eight where both
parents graduated college. Finally a binary variable was created for each participant (FGCS; \(n = 69\); Non-FGCS; \(n = 17\)).

**Measures**

**Understanding and Acceptance.** Understanding and acceptance of family was coded from responses to the semi-structured interview. The initial questions were: “How well does your family understand and accept the changes in you since you started college?” and “How well does your family understand and accept your plans and aspirations for graduate school?” Each was coded by two research assistants and differences reconciled. Five levels of understanding and acceptance were coded: 0 = Not well at all, 1 = Somewhat well, 2 = They understand but don’t accept, 3 = They accept but don’t understand, 4 = They understand and accept. The rationale for the relative positions of points 2 and 3 on the scale is that the students would likely be more understanding of their family’s lack of understanding and less accepting of their family’s lack of acceptance. Inter-rater reliability for each of the interview for each rater against the consensus rating was “substantial” as defined by Landis and Koch (1977) with Cohen’s Kappas ranging from .66 to .75 and Spearman’s Rho ranging from .83 to .90 (See Table 3).

Because the data did not support treating this variable as continuous, categorical variables of “Not well at all,” “Somewhat well or not completely,” and “Understands and Accepts” were created for each item. Contrary to expectations, the “Understands and Accepts” category for each item contained two-thirds of the participants (See Table 4).
Student Adaptation to College Questionnaire (SACQ). The Student Adaptation to College Questionnaire (SACQ) is a 67 item self report measure (Baker & Siryk, 1989). Participants rate “I” statements in a nine point Likert type scale from “Applies Very Closely to Me” to “Doesn’t Apply to Me at All.” Respondents circle an asterisk for each item, masking the point value and reversed items. A Full Scale measuring a general level of adjustment is returned as well as four subscales: Academic (Coping with academic demands), Social (Coping with interpersonal-societal demands), Personal-Emotional (Psychological distress and somatic symptoms), Attachment (Feeling connected to one’s school). The normative was separated by gender (Baker & Siryk, 1989). Prior work by the author with this sample found unusually high academic adjustment and other scales at or below the normative sample (Vance, Gonzalez, & Jenkins, 2012). For this reason a “Psychosocial” scale was created excluding the academic related items. All scales demonstrated good internal consistencies with Cronbach’s Alphas ranging from .83 to .93 (See Table 5).

Self-Definition. Self-definition was measured using a thematic apperception technique scoring system developed by Abigail Stewart (1992a). Each of nine pictures was presented for 30 seconds and the participants were given five minutes to write out a story by hand in a group setting. The cards used were: 1. A young boy is contemplating a violin which rests on a table in front of him (Card 1; p. 18, Murray, 1943). 2. Country scene: in the foreground is a young women with books in her hand; in the background a man is working in the fields and an older woman is looking on (Card 2; p. 18, Murray, 1943). 3. On the floor against a couch is the huddled form of a boy with his head bowed on his right arm. Beside him on the floor is a
revolver (Card 3BM; p. 19, Murray, 1943). 4. Two women are wearing lab coats. One is working with test tubes while another looks on (p. 387, McClelland, 1975). 5. A young man is lying on a couch with his eyes closed. Leaning over him is the gaunt form of an elderly man, his hand stretched out above the face of the reclining figure (Card 12M; p. 20, Murray, 1943). 6. A woman is clutching the shoulders of a man whose face and body are averted as if he were trying to pull away from her (Card 4; p. 19, Murray, 1943). 7. A black businessman and a white businessman in an office scene (p. 218, Flemming, 1984). 8. A man on a trapeze grasping the hands of woman under a tent (p. 388, McClelland, 1975). 9. A young woman’s head against a man’s shoulder (Card 10; p. 19, Murray, 1943).

The stories were transcribed into electronic format, then proofed by a different research assistant. The stories were scored by trained scorers, differences reconciled, and consensus scores recorded. A mean score for the nine cards was computed as an individual’s Self-definition score.

A person’s self-definition score denotes a person’s location on a continuum from self-defining (2) to socially defined (-3). Each story is evaluated for the presence or absence of 5 categories. Two of these indicate the presence of self-definition. Causality (C, +1) is scored for the explicit use of a word or phrase denoting causation such as, because, thus, or as a result. Reason-Action Sequence (RA, +1) is scored when the last temporal element of the story is an instrumental action with a clear reason. Not only must the actor’s reason for the action be clear but it must be told using the active voice of an active main verb. Three categories indicate the presence of social definition. Uncaused Action (UA, -1) is scored when no action is depicted at
all, the last temporal action is irrational, or the actions are described without a reason. Mental State Ending (MSE, -1) is scored when the story concludes with the mental (or emotional) state of a character or a state of being (as opposed to an action). Ineffective Actor (IA, -1) is scored when the actor is unable to act or his actions are futile. It is also scored when the ending is impersonal. Any scores from the five categories are summed for each card resulting in a score ranging from a possible -3 to 2. The mean of the card scores is the participant’s Self-definition score.

Two teams of two scorers each scored the stories then reconciled their differences. Their consensus scores were used for analyses. The scorers were unaware of the hypotheses or any other data. One team scored cards 1, 2, 5, 6, and 9. This team’s interrater reliability, as measure by Pearson’s r, ranged from .68 to .98. The other team scored cards 3, 4, 7, and 8, with interrater reliabilities ranging from .79 to .99 (See Table 6). Internal consistency, as measured by Cronbach’s alpha, was .43 (See Table 7). Because TAT scores represent an index, not a scale (see Streiner, 2003), high alpha is neither expected nor required.

Procedures

Students were recruited from McNair Scholars Programs from six southwestern United States universities. All measures were completed in paper and pencil form, in group settings, at the respondents’ respective campuses. The first measure administered was always the TAT stories. Following the TAT, the participants were given a packet including demographic questions, self-report measures and open ended questions. During this time the participants were given one-on one semi-structured interviews by a research team member. Each
participant was compensated $30 for their participation. The data was collected in 22 sessions from March, 2006 to August, 2010. (See Tables 1 and 2 for demographic breakdown by institution.)

Results

Two participants did not complete the TAT stories, one did not complete the self-report data, and two did not complete the interviews. Participants with missing data were excluded from applicable analysis.

Demographic Descriptive Associations.

A prototypical student in this study is a 22 year old single Latino woman, who is a first generation college student with a 3.50 grade point average. The participation agreement of the various institutions precludes the release of outcome variables by institution; however, many variables were examined for institutional differences. In most cases, differences were minimal or the sample from an institution was too small for any differences to be meaningful. No significant difference was found by site on either of the understanding and acceptance items, self-definition scores, or any of the SACQ scales.

Although a first generation or lower SES student is typically older than traditional, our sample includes participants in their 30s, 40s and one over fifty. Students over 30 years of age were examined carefully for outliers on all variables of interest. Of particular concern for older students is the possible interpretation of “family,” in the “understand and support” questions as family of procreation as opposed to family of origin. Students aged 30 or over were more likely to be women \( (n = 12) \) than men \( (n = 2) \) \( \chi^2 (1) = 1.33, p = .250 \) but not significantly so. As
would be expected, the older students were significantly more likely to have been married ($\chi^2(4) = 27.78, p < .001$) and to have children ($M = 2.21, SD = 1.67; t(13.10) = -4.82, p < .001$). The students over 30 also had a significantly higher GPA ($M = 3.72, SD = .25, n = 14$) than those 29 and younger ($M = 3.46, SD = .32, n = 71; t(83) = -2.96, p = .004$). (See Table 8) The students aged 30 and over identified as either Anglo ($n = 5$), Latino ($n = 6$), or Other ($n = 5$), with none identifying as African American. (See Table 9)

Most of the participants identified as solely Anglo/European American/White ($n = 17$), solely African American/Black ($n = 17$), or solely Hispanic/Latino ($n = 39$). Thirteen remaining participants identified as mixed race or different race. For the purposes of examining for ethnic difference these remaining participants were combined into a Mixed or Other Ethnicity group ($n = 13$).

Acceptance and understanding. The number of students coded as “both understands and accepts” for each question was 54, accounting for 67% of the respondents. Students were grouped into 1 of 3 groups, family Does Not understand and accept (coded 0), family Somewhat understands and accepts (coded 1), and family Both understands and accepts (coded 2; Table 4). Most students reported both acceptance and understanding for changes since entering college ($M = 3.16$, Median $= 4.00$, Mode $= 4.00$, SD $= 1.39$) and aspirations for graduate school ($M = 3.15$, Median $= 4.00$, Mode $= 4.00$, SD $= 1.43$; Table 10). T-tests or one-way ANOVAs were used to test for demographic differences. No significant differences were found based on gender ($t(78) = -1.12; p = .268$; and $t(77) = -1.75; p = .126$), ethnicity ($F(3,79) = 1.17; p = .652$; and $F(3,78) = 1.22; p = .308$), age group ($t(78) = 1.13; p = .260$; and $t(77) = .83; p$
institution \( F(3, 80) = .84; p = .526 \); and \( F(3, 79) = .53; p = .752 \), or first generation status \( t(78) = -.96; p = .341 \); and \( t(77) = -.73; p = .469 \) for changes and aspirations respectively (See Tables 11 & 12).

**Student Adaptation to College Questionnaire (SACQ).** The SACQ was developed with separate normative data for men and women. The results by gender are reported in Table 5, however no gender differences were found in this sample (Academic \( t(23.98) = .39; p = .704 \); Social \( t(79) = -.97; p = .335 \); Personal-Emotional \( t(79) = 1.22; p = .226 \); Attachment \( t(79) = -.65; p = .506 \); Psychosocial \( t(79) = -.17; p = .864 \); Full Scale \( t(79) = .18; p = .862 \)). Likewise, no differences were found on the basis of age group (Academic \( t(79) = -.41; p = .685 \); Social \( t(79) = 1.86; p = .117 \); Personal-Emotional \( t(21.87) = .82; p = .424 \); Attachment \( t(79) = -.44; p = .664 \); Psychosocial \( t(79) = .49; p = .625 \); Full Scale \( t(26.62) = .17; p = .262 \)), first generation status (Academic \( t(79) = -.50; p = .960 \); Social \( t(79) = .19; p = .852 \); Personal-Emotional \( t(79) = .13; p = .895 \); Attachment \( t(79) = 1.52; p = .134 \); Psychosocial \( t(79) = .54; p = .589 \); Full Scale \( t(79) = .30; p = .763 \)), or by institution (Academic \( F(5, 80) = .24; p = .945 \); Social \( F(5, 80) = .63; p = .678 \); Personal-Emotional \( F(5, 80) = .22; p = .951 \); Attachment \( F(5, 80) = .37; p = .869 \); Psychosocial \( F(5, 80) = .29; p = .918 \); Full Scale \( F(5, 80) = .15; p = .979 \) (See Tables 13, 14, & 15).

An ethnic difference was found on the Social Subscale \( F(3, 77) = 3.48; p = .020 \) but not the other subscales (Academic \( F(3, 77) = 1.50; p = .220 \); Personal-Emotional \( F(3, 77) = 2.23; p = .092 \); Attachment \( F(3, 77) = 1.14; p = .338 \); Psychosocial \( F(3, 77) = 1.99; p = .123 \); Full Scale \( F(3, 77) = 1.85; p = .145 \) (See Table 16 for a more detailed breakdown). Post hoc comparisons revealed that students who identified as African-American scored higher on the Social scale (M
Self-definition score were not correlated to the number of words used in the responses ($r = .14, p = .211, N = 82$). Descriptive statistics were computed for Self-definition, then analyzed for differences related to gender, ethnicity, institution, first generation status, and age. The mean Self-Definition score was -.25 with a standard deviation of .53. Mean Self-definition score for each card ranged from -.44 to .01 (See Table 7). No significant differences were found based on age ($t(82) = 1.17; p = .244$), gender ($t(82) = 1.17; p = .247$), first generation status ($t(82) = .42; p = .673$), or ethnicity ($F(3,83) = 1.52; p = .217$) (See Table 17). Institutional differences were not significant ($F(4,79) = .842, p = .524; Levene(4,80) = 2.50, p = .049; Table 18$) Welch not calculated), but testing was limited due to one site with only one participant.

Hypothesis Testing

Hypothesis 1: For students in the McNair Scholars Program, self-definition scores will be significantly higher than the normal distribution expected from the general population. [Stewart (1980) reported $M = -.09, SD = 3.19, N = 100$.] The students in this sample did not score significantly differently from the general college student population sample referenced above ($M = -.27, SD = .51 (t(183) = .56, p = .579$). Thus, Hypothesis 1 was not supported.

Hypothesis 2: McNair Scholars higher in self-definition will score higher than those whose scored lower in self-definition for the psychosocial domains of college adjustment in general and for institutional attachment in particular. Linear regression was used to assess the contribution of Self-definition scores to the newly created SACQ Psychosocial Scale and the
Attachment Scale. Self-definition was not found to significantly predict psychosocial adjustment, $B = 17.24$, $\beta = .212$, $t(79) = -1.90$, $p = .061$, $R^2 = .045$ or institutional attachment, $B = 2.47$, $\beta = .066$, $(79) = .579$, $p = .564$, $R^2 = .004$. Thus, Hypothesis 2 was not supported. As a follow-up analysis, a correlation matrix was computed to look at pre-existing relationships between Self-definition and the SACQ Scales. The only bivariate relationship noted was between Self-definition and the SACQ Personal-Emotional Scale ($r = .253$, $p = .025$).

Hypothesis 3: McNair Scholars will report significantly more acceptance and understanding from their families of changes in them since entering college than they will for their aspirations for graduate school. Responses to the “Changes” question (M = 3.16, SD = 1.39, N = 82) were highly correlated to responses to the “Aspirations” question (M = 3.15, SD = 1.43, N = 81; $r = .764$). A paired samples t-test found no significant difference, $t(80) = .345$, $p = .731$, (Cohen’s $d = -.01$) between the “Changes” and the “Aspirations” questions. Thus, Hypothesis 3 was not supported.

Hypothesis 4: Psychosocial Adjustment and Institutional Attachment will be greater for those students with more family understanding and acceptance of changes in the student since entering college. Participants were grouped by their “Changes” and responses into Not understood and accepted (Not UandA, coded 0), Somewhat understood and accepted (Somewhat UandA, coded 1), and Both understood and accepted (Both UandA, coded 2). Psychosocial Adjustment and Institutional Attachment were each evaluated with one way ANOVA. The mean scores for Psychosocial Adjustment were 240.91 (SD = 37.71, n = 11) for Not UandA, 243.44 (SD = 42.24, n = 16) for Somewhat UandA, and 245.02 (SD = 38.21, n = 49). No
significant differences were found ($F(2,75) = .053, p = .949, \eta^2 = .001$). The mean scores for Institutional Attachment were 103.00 (SD = 19.42, $n = 11$) for Not UandA, 103.44 (SD = 19.39, $n = 16$) for Somewhat UandA, and 106.02 (SD = 16.61, $n = 49$). No significant differences were found ($F(2,75) = .216, p = .806, \eta^2 = .006$). Thus, Hypothesis 4 was not supported. (See Table 19)

**Hypothesis 5:** Self Definition will be greater for those students with less family understanding and acceptance of the student’s aspirations to graduate school. Participants were grouped by their “Aspirations” and responses into Not understood and accepted (Not UandA), Somewhat understood and accepted (Somewhat UandA), and Both understood and accepted (Both UandA). Self-definition was evaluated with one way ANOVA. The mean scores for Self-definition were $-.23$ (SD = $0.46$, $n = 10$) for Not UandA, $-.38$ (SD = $0.47$, $n = 19$) for Somewhat UandA, and $-.26$ (SD = $0.53$, $n = 52$) for both UandA. No significant differences were found ($F(2,78) = .406, p = .668, \eta^2 = .011$). These differences were also not significant when tested with a polynomial ANOVA (College, ($F(1,77) = 1.31, p = .255$; Grad School, ($F(1,76) = .758, p = .357$). Thus, Hypothesis 5 was not supported. (See Table 20)

**Post Hoc Power Analysis.** A post hoc power analysis was conducted on every hypothesis test as well as related variables for hypotheses four and five (See Table 21). With two exceptions, the observed power was less than .10. The exceptions were the single sample t-test for hypothesis one (.112) and the SACQ Psychosocial by Self-Definition regression for hypothesis two (.477). An analysis was conducted to determine the needed sample sizes given the found effect sizes. Again the SACQ Psychosocial by Self-Definition regression for hypothesis
two was an exception with 279 participants needed for a .95 power level. The remaining tests needed sample sizes ranging from 2033 to 15,443,241. A sensitivity analysis was conducted to determine the needed effect size given the sample size with all test requiring a moderate ($f^2 = .17$, $d = .37$ to .40) to large ($\eta^2 = .45$ to .46) effect size.

Discussion

The overarching idea behind this project was that first generation college students with aspirations to graduate school were similar to women with gender role independent career aspirations in the 1960s in that both desired life paths outside of other’s expectations. Despite a common willingness to follow their own preferences even in contrast to what prevailing social norms dictate, self-definition does not appear to be a common underlying factor. Understanding and acceptance from one’s family emerged as more common among the sample than originally conceived. In fact, understanding and acceptance from family may well be the uniting characteristic of the McNair college students sampled rather than the self defining personality style as originally conceived.

The participants in this study, contrary to the first hypothesis, were found to be more socially defined than the general population. The prediction that McNair Scholars would be higher in self-definition was based on presumed similarities between their experience of college and that of the career oriented women of the 1960s used to validate the construct (Stewart and Winter, 1974). Jenkins (1996) noted that over time, social expectations have changed to the point where self-definition and career orientation were no longer linked. Now that women having careers is ubiquitous, perhaps career orientation today reflects a woman’s being more
socially defined than those choosing to stay home and raise children. Perhaps similar changes have occurred for first-generation college students over time where college attendance is seen as more normative for the role of a young adult (Arnett, 1998). A less likely possible explanation is that students high in self-definition do not enroll in the McNair Scholars Program to the same degree as the socially defined. Another possibility is a change in the student due to participation in the McNair Scholars Program as participation makes college attendance and graduate school aspirations more normative.

Self-definition was not related to successful adjustment to college as predicted by our second hypothesis. If the participants viewed college as normative for their social role, then self-definition would not be expected to play a role in their adjustment. Jenkins (1996) found that socially defined women were more susceptible to experiencing conflict between their family and work roles than were self-defined women. Perhaps for socially defined first-generation college students this role conflict is a larger threat to successful adjustment than are social expectations. Thus, familial support may be of greater importance to these college students than is freedom from role constraint and since most of them had this, support appears to be a more unifying factor for this sample than self-definition.

The third hypothesis predicted that families would understand and accept the changes in the students since entering college to a greater degree than their aspirations to attend graduate school. This was not the case. Not only were no differences found between the two items but understanding and acceptance was much higher than expected. In fact, on both items the median and the mode were both the highest rating (4 on a 0 to 4 scale). A similar item to
the “changes since college” question, but in multiple-choice format, was included in the
Student Stress Survey, an online survey completed by over 900 college undergraduates: “How
does your family understand and accept the changes you since you started college?
Don’t Know or no change Not well at all Somewhat well They understand but
don’t accept They accept but don’t understand They understand and accept” both
understanding and acceptance was the most common answer. “Both understanding and
acceptance” was reported by 45% of the Student Stress Survey first-generation college students
and 57% of the Student Stress Survey non-first-generation students (Vance, 2015). Comparing
this to the 67% of the McNair Scholars Students reporting this, perhaps family support is more
defining of this population than is self-definition. One possible explanation is that participation
in the McNair Scholar Program helps college and graduate school seem more normative to the
student’s families as well as to the Scholars.

The fourth hypothesis predicted greater psychosocial adjustment and institutional
attachment for students whose changes since entering college were understood and accepted
by their families. Also examined was psychosocial adjustment and institutional attachment
based on the student’s family’s acceptance and understanding of their aspirations for graduate
school. No differences for either were found. This is most likely due to the limited range of the
understanding and acceptance variables. It is possible that familial understanding and
acceptance influences a student’s decision to apply for the program. It is more likely that
acceptance into this prestigious program, with accompanying stipend, may change the family’s
conception of the student and increase their understanding and acceptance.
The final hypothesis predicted higher self-definition for students with less familial understanding and acceptance of their aspirations to graduate school. A similar comparison was made based on the student’s family’s understanding and acceptance of the changes since entering college. There were no significant differences in either case. However, an unexpected trend was observed in both cases in which self-definition was higher for students with both understanding and acceptance and those with neither understanding nor acceptance than it was for students in the “somewhat” category, for whom it seems familial support was not as clearly defined. It appears that clarity from one’s family may be related more closely to self-definition than is the understanding and support itself. Of additional concern with this possible finding is that the more socially defined individuals may be receiving inconsistent messages from their family. This is problematic in light of Jenkins’s (1996) finding that socially defined individuals are more susceptible to role conflict. Remember however, these differences were still not significant when tested and this is merely a suggestion that more research is needed.

Limitations

Some limitations of the study need to be kept in mind when interpreting its results. The sample used to represent the general student population for the comparison in testing the first hypothesis had only 100 participants, all women, and they were freshman at a prestigious private women’s college in the northeastern U.S. in 1960 (Stewart, 1980) rather than at a large comprehensive state university in Texas in the late 2000s. Though designed to be a representative sample, societal changes may have possibly altered the overall prevalence of self-definition in college students. Stewart’s (1980) sample also used a different set of cards
than the current study. In prior work by the author, self definition was not found to be affected by picture content, as opposed to goal pursuit which was (Vance, Baxley, Hogan, Johnson, & Jenkins, 2014, March, & 2014, July). While not identified specifically, Stewart’s (1980) study used six TAT cards and did not describe the process of card selection. By contrast, this study’s card set was selected to be specifically applicable to McNair Scholars Program students. A large, diverse, and recent sample, with the same set of cards, would increase the comparative value of a normative sample.

Understanding and acceptance from family members was assessed by coding responses to items from a semi structured interview. The researchers conducting the interview did not know how the responses were to be coded and thus did not prompt or record responses with this study’s coding system in mind. Similarly, interviewers were inconsistent with their recording of the responses. For example, some appeared to record the participant’s words while others recorded their impressions of the participant’s answers. Also, some were more detailed and others more succinct. It is quite possible the results would differ if the interviewers had a coding system in mind while addressing these items. Related to this is the comparison to the similar item in the Student Stress Survey. Methodological differences between the coding of interview responses and the multiple-choice self-report format limit the interpretability of these differences.

While this study lacked statistical power, in the majority of cases the required sample sizes that defined significance given the obtained effect sizes were unreasonable. The failure to find significance, if a relationship exists at all, is related to the small effect sizes. In the case of
the understanding and acceptance variables this is likely related to a lack of overall variance in this sample. The self-definitions score are also limited by a restricted range. The standard deviation for this sample was .53 and the standard deviation for the comparison group Stewart’s (1980) normative sample was 3.19.

Finally, African-American participants scored higher than others in self-definition; this should be interpreted with caution. In this sample a majority of the African-American participants came from one institution. Thus, it is not possible to isolate ethnic difference from that of the institution or its McNair Scholar Program. African-American participants were also significantly younger based on the binary younger student versus older student groups. Thus, this may reflect developmental rather than cultural differences. While deserving further investigation, these other systematic differences limit the value of this finding as merely a cultural difference.

**Implications and future research directions**

The primary implication of this study for students in the McNair Scholars Program is the importance of familial understanding and acceptance. Are there students in our universities that may be good candidates for the McNair Scholars Program but lack the familial support to join or be accepted? Future research should be twofold. One should address the measurement issues in this study. More standardized and validated methods of measuring familial understanding and acceptance of students’ academic goals are needed. These new methods should also look for more nuanced differences than the single items used in the study allowed. The second area of research should be geared toward assisting McNair Scholars Program
administrators in finding, recruiting, and retaining the students who are more lacking in familial support. There may be excellent candidates for the program who are not being reached or sufficiently encouraged to apply. And once accepted, for those with limited familial support, outreach to families for extra-familial support may be warranted.

Another implication of the study is the need to clarify and refine the construct of self-definition. At the very least, the construct’s correlates have shifted. This study sought to apply Stewart and Winter’s (1974) education and career attitudes of women to a different population (McNair Scholars of both genders). A broader approach is needed. To enhance our understanding of this construct we need to conceptualize comparison groups beyond that of simply an updated normative sample. Jenkins (2015) describes a three step process to derive meaningful information from TAT stories: one, selection of pictures; two, constructing the context and instructions to elicit the narratives; and three, select of interpretive approach (e.g. choosing a scoring system). Stimuli, demographics, personality characteristics, situational context, and lability of the construct being examined can all account for differences in a given score. Comparison groups must therefore be carefully constructed to alter or hold constant any applicable variables.

In addition, increased diversity of populations is needed to explore the potential sources of social role definition. While career and family roles for women were quite salient at the time this construct was developed, different roles may be more active at this time. For example, acculturation of immigrants and their children, relationships to families and peers for sexual minorities, and familial and institutional relationships for various religious groups may all
influence self-definition in different ways. All of these involve groups that exert social influence, and from them many individuals may base their identities. Understanding of a variety of manifestations is needed to further elucidate the construct of self-definition.
### Table 1
Demographic Frequencies by Institution

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Men</th>
<th>Women</th>
<th>FGCS</th>
<th>Single</th>
<th>Been Married²</th>
<th>Have Kids</th>
<th>Median Age</th>
<th>Age 30+</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A¹</td>
<td>15</td>
<td>3</td>
<td>11</td>
<td>9</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>23</td>
<td>1</td>
<td>3.56</td>
</tr>
<tr>
<td>School B</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>11</td>
<td>-</td>
<td>1</td>
<td>24</td>
<td>2</td>
<td>3.57</td>
</tr>
<tr>
<td>School C</td>
<td>37</td>
<td>9</td>
<td>28</td>
<td>31</td>
<td>29</td>
<td>8</td>
<td>7</td>
<td>22</td>
<td>7</td>
<td>3.45</td>
</tr>
<tr>
<td>School D</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>-</td>
<td>3.58</td>
</tr>
<tr>
<td>School E</td>
<td>20</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>5</td>
<td>23</td>
<td>4</td>
<td>3.62</td>
</tr>
<tr>
<td>School F</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>21</td>
<td>-</td>
<td>3.37</td>
</tr>
<tr>
<td>Total Sample</td>
<td>86</td>
<td>23</td>
<td>63</td>
<td>69</td>
<td>67</td>
<td>19</td>
<td>15</td>
<td>22</td>
<td>14</td>
<td>3.50</td>
</tr>
</tbody>
</table>

¹ One participant did not complete demographic form.
² Includes married, divorced, widowed, and separated.

### Table 2
Ethnic Identification by Institution

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anglo</th>
<th>Latino</th>
<th>African American</th>
<th>Asian</th>
<th>Native American</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A¹</td>
<td>-</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>School B</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>School C</td>
<td>9</td>
<td>11</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>School D</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>School E</td>
<td>6</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>School F</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total Sample</td>
<td>21</td>
<td>42</td>
<td>18</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

¹ One participant did not complete demographic form.

### Table 3
Understanding and Acceptance Interrater Reliability

<table>
<thead>
<tr>
<th>Question</th>
<th>Rater ¹¹</th>
<th>Rater ²¹</th>
<th>Cross²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>K</td>
<td>p</td>
</tr>
<tr>
<td>Changes since college</td>
<td>.88</td>
<td>.75</td>
<td>.83</td>
</tr>
<tr>
<td>Aspirations for Graduate School</td>
<td>.89</td>
<td>.66</td>
<td>.83</td>
</tr>
</tbody>
</table>

¹ Rater compared with consensus score
² Raters compared to each other
Table 4
Understanding and Acceptance Frequencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>College</th>
<th>Grad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Not well at all</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Somewhat well, not completely</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Understands and Accepts</td>
<td>54</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 5
Student Adaptation to College Questionnaire by Scale and Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th></th>
<th>Women</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n  M</td>
<td>SD</td>
<td>T</td>
<td>α</td>
</tr>
<tr>
<td>Full Scale</td>
<td>20 427.90</td>
<td>91.48</td>
<td>50.98</td>
<td>.98</td>
</tr>
<tr>
<td>Psychosocial Scale</td>
<td>20 241.95</td>
<td>49.06</td>
<td>-.96</td>
<td>.96</td>
</tr>
<tr>
<td>Academic Scale</td>
<td>20 158.10</td>
<td>38.58</td>
<td>55.92</td>
<td>.92</td>
</tr>
<tr>
<td>Social Scale</td>
<td>20 122.45</td>
<td>27.69</td>
<td>47.86</td>
<td>.86</td>
</tr>
<tr>
<td>Personal-Emotional</td>
<td>20 84.80</td>
<td>22.13</td>
<td>27.85</td>
<td>.85</td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment Scale</td>
<td>20 101.50</td>
<td>22.71</td>
<td>50.85</td>
<td>.85</td>
</tr>
</tbody>
</table>

One participant did not complete demographic form.

aVariable created for this study, not in normative tables.

Table 6
Self-Definition Interrater Reliability

<table>
<thead>
<tr>
<th>TAT Card</th>
<th>Rater 1 ICC</th>
<th>Rater 2 ICC</th>
<th>Cross Rater ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card 1</td>
<td>.91</td>
<td>.99</td>
<td>.90</td>
</tr>
<tr>
<td>Card 2</td>
<td>.81</td>
<td>.90</td>
<td>.81</td>
</tr>
<tr>
<td>Card 3</td>
<td>.84</td>
<td>.97</td>
<td>.81</td>
</tr>
<tr>
<td>Card 4</td>
<td>.91</td>
<td>1.00</td>
<td>.92</td>
</tr>
<tr>
<td>Card 5</td>
<td>.91</td>
<td>.90</td>
<td>.79</td>
</tr>
<tr>
<td>Card 6</td>
<td>.87</td>
<td>.91</td>
<td>.80</td>
</tr>
<tr>
<td>Card 7</td>
<td>.88</td>
<td>.98</td>
<td>.87</td>
</tr>
<tr>
<td>Card 8</td>
<td>.97</td>
<td>.92</td>
<td>.90</td>
</tr>
<tr>
<td>Card 9</td>
<td>.88</td>
<td>.99</td>
<td>.87</td>
</tr>
</tbody>
</table>

1With Consensus Score
2Rater 1 with Rater 2
Table 7
Self-Definition by Card

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card 1</td>
<td>83</td>
<td>.01</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Card 2</td>
<td>82</td>
<td>-.28</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Card 3</td>
<td>85</td>
<td>-.33</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Card 4</td>
<td>85</td>
<td>-.14</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>Card 5</td>
<td>85</td>
<td>-.22</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Card 6</td>
<td>85</td>
<td>-.34</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>Card 7</td>
<td>85</td>
<td>-.39</td>
<td>1.16</td>
<td></td>
</tr>
<tr>
<td>Card 8</td>
<td>84</td>
<td>-.23</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Card 9</td>
<td>85</td>
<td>-.44</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>86</td>
<td>-.26</td>
<td>.53</td>
<td>.43</td>
</tr>
</tbody>
</table>

Table 8
Demographic Variables by Age Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Men</th>
<th>Women</th>
<th>Single</th>
<th>Married(^2)</th>
<th>Have Kids</th>
<th>FGCS</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged 29 and younger</td>
<td>72</td>
<td>21</td>
<td>51</td>
<td>63</td>
<td>9</td>
<td>4</td>
<td>57</td>
<td>3.46</td>
</tr>
<tr>
<td>Aged 30 and older</td>
<td>14</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>3.72*</td>
</tr>
<tr>
<td>Total Sample</td>
<td>81</td>
<td>23</td>
<td>63</td>
<td>67</td>
<td>19</td>
<td>15</td>
<td>69</td>
<td>3.50</td>
</tr>
</tbody>
</table>

One participant did not complete demographic form.

\(^2\)Includes Married, Divorced, Widowed, and Separated.

*Significant at \( p = .004 \)

Table 9
Ethnic Identification by Age Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anglo</th>
<th>Latino</th>
<th>African American</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged 29 and younger</td>
<td>16</td>
<td>36</td>
<td>18</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Aged 30 and older</td>
<td>5</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Total Sample</td>
<td>21</td>
<td>42</td>
<td>18</td>
<td>4</td>
<td>11</td>
</tr>
</tbody>
</table>

One participant did not complete demographic form.

Table 10
Understanding and Acceptance

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>Med</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes since college</td>
<td>82</td>
<td>3.13</td>
<td>4.00</td>
<td>4.00</td>
<td>1.44</td>
</tr>
<tr>
<td>Aspirations for Graduate School</td>
<td>81</td>
<td>3.15</td>
<td>4.00</td>
<td>4.00</td>
<td>1.43</td>
</tr>
<tr>
<td>Sum of U and A</td>
<td>81</td>
<td>6.33</td>
<td>8.00</td>
<td>8.00</td>
<td>2.64</td>
</tr>
</tbody>
</table>
Table 11
Acceptance and Understanding by Ethnicity, Gender, Age, and Generation

<table>
<thead>
<tr>
<th>Variable</th>
<th>College</th>
<th></th>
<th></th>
<th>Grad</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
<td>p</td>
<td>n</td>
</tr>
<tr>
<td>African American</td>
<td></td>
<td>14</td>
<td>3.07</td>
<td>1.59</td>
<td>.908</td>
<td>14</td>
</tr>
<tr>
<td>Native American/Alaskan Native</td>
<td></td>
<td>5</td>
<td>2.80</td>
<td>1.79</td>
<td>.622</td>
<td>5</td>
</tr>
<tr>
<td>Anglo</td>
<td></td>
<td>21</td>
<td>3.14</td>
<td>1.42</td>
<td>.912</td>
<td>21</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>3</td>
<td>3.67</td>
<td>.58</td>
<td>.503</td>
<td>3</td>
</tr>
<tr>
<td>Latino</td>
<td></td>
<td>42</td>
<td>2.95</td>
<td>1.45</td>
<td>.302</td>
<td>41</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>20</td>
<td>2.80</td>
<td>1.64</td>
<td>.268</td>
<td>19</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>60</td>
<td>3.22</td>
<td>1.38</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Aged 29 and younger</td>
<td></td>
<td>66</td>
<td>3.20</td>
<td>1.38</td>
<td>.260</td>
<td>65</td>
</tr>
<tr>
<td>Aged 30 and older</td>
<td></td>
<td>14</td>
<td>2.71</td>
<td>1.73</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>First Generation</td>
<td></td>
<td>63</td>
<td>3.03</td>
<td>1.47</td>
<td>.341</td>
<td>62</td>
</tr>
<tr>
<td>Not First Generation</td>
<td></td>
<td>17</td>
<td>3.41</td>
<td>1.37</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[^1\text{Ethnic identification compared to all others}\]

Four category Ethnicity by College ANOVA $F(3,79) = 1.17; p = .652$

Four category Ethnicity by Graduate School ANOVA $F(3,78) = 1.22; p = .308$

Table 12
Acceptance and Understanding by Institution

<table>
<thead>
<tr>
<th>Variable</th>
<th>College</th>
<th></th>
<th></th>
<th>Grad</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>School A[^1]</td>
<td></td>
<td>14</td>
<td>3.64</td>
<td>.63</td>
<td>14</td>
<td>3.29</td>
</tr>
<tr>
<td>School B</td>
<td></td>
<td>11</td>
<td>2.91</td>
<td>1.58</td>
<td>11</td>
<td>2.64</td>
</tr>
<tr>
<td>School C</td>
<td></td>
<td>5</td>
<td>3.00</td>
<td>1.61</td>
<td>5</td>
<td>3.22</td>
</tr>
<tr>
<td>School D</td>
<td></td>
<td>1</td>
<td>4.00</td>
<td></td>
<td>1</td>
<td>3.00</td>
</tr>
<tr>
<td>School E</td>
<td></td>
<td>20</td>
<td>2.90</td>
<td>1.58</td>
<td>19</td>
<td>3.05</td>
</tr>
<tr>
<td>School F</td>
<td></td>
<td>3</td>
<td>4.00</td>
<td>0</td>
<td>3</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Four category Institution by College ANOVA $F(3,80) = .84; p = .526$

Four category Institution by Graduate School ANOVA $F(3,79) = .53; p = .752$
### Table 13
SACQ Scales by Institution

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full</th>
<th>Psycho</th>
<th>Social</th>
<th>Academic</th>
<th>Social</th>
<th>Personal Emotional</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A (n = 10)</td>
<td>433.40</td>
<td>249.10</td>
<td>159.50</td>
<td>136.00</td>
<td>77.60</td>
<td>107.80</td>
<td></td>
</tr>
<tr>
<td>School B (n = 11)</td>
<td>429.55</td>
<td>249.82</td>
<td>154.00</td>
<td>129.55</td>
<td>78.82</td>
<td>108.81</td>
<td></td>
</tr>
<tr>
<td>School C (n = 37)</td>
<td>426.05</td>
<td>244.19</td>
<td>153.97</td>
<td>127.62</td>
<td>81.22</td>
<td>103.32</td>
<td></td>
</tr>
<tr>
<td>School D (n = 1)</td>
<td>441.00</td>
<td>239.00</td>
<td>178.00</td>
<td>115.00</td>
<td>91.00</td>
<td>110.00</td>
<td></td>
</tr>
<tr>
<td>School E (n = 19)</td>
<td>414.84</td>
<td>234.00</td>
<td>154.58</td>
<td>120.21</td>
<td>77.68</td>
<td>100.21</td>
<td></td>
</tr>
<tr>
<td>School F (n = 3)</td>
<td>440.33</td>
<td>251.00</td>
<td>163.33</td>
<td>128.33</td>
<td>87.00</td>
<td>103.33</td>
<td></td>
</tr>
<tr>
<td>Total Sample (n = 81)</td>
<td>425.52</td>
<td>243.36</td>
<td>155.44</td>
<td>127.05</td>
<td>79.95</td>
<td>103.98</td>
<td></td>
</tr>
</tbody>
</table>

### Table 14
SACQ Scales by Age Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full</th>
<th>Psycho</th>
<th>Social</th>
<th>Academic</th>
<th>Social</th>
<th>Personal Emotional</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged 29 and younger</td>
<td>425.88</td>
<td>244.32</td>
<td>154.91</td>
<td>128.83</td>
<td>80.25</td>
<td>103.58</td>
<td></td>
</tr>
<tr>
<td>Aged 30 and older</td>
<td>423.42</td>
<td>237.83</td>
<td>158.50</td>
<td>116.83</td>
<td>76.67</td>
<td>106.25</td>
<td></td>
</tr>
</tbody>
</table>

One participant did not complete demographic form.

### Table 15
SACQ Scales by First Generation Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full</th>
<th>Psycho</th>
<th>Social</th>
<th>Academic</th>
<th>Social</th>
<th>Personal Emotional</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Generation</td>
<td>426.60</td>
<td>244.52</td>
<td>155.37</td>
<td>127.28</td>
<td>80.09</td>
<td>105.46</td>
<td></td>
</tr>
<tr>
<td>Not First Generation</td>
<td>420.36</td>
<td>237.39</td>
<td>155.79</td>
<td>125.93</td>
<td>79.29</td>
<td>96.86</td>
<td></td>
</tr>
</tbody>
</table>

### Table 16
SACQ Scales by Ethnic Identification

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anglo</th>
<th>Latino</th>
<th>African American</th>
<th>Asian</th>
<th>Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Scale</td>
<td>417.29</td>
<td>426.65</td>
<td>447.82</td>
<td>347.00</td>
<td>409.20</td>
</tr>
<tr>
<td>Psychosocial Scale</td>
<td>234.57</td>
<td>244.68</td>
<td>259.59</td>
<td>208.25</td>
<td>231.40</td>
</tr>
<tr>
<td>Academic Scale</td>
<td>156.24</td>
<td>156.20</td>
<td>156.65</td>
<td>117.50</td>
<td>158.00</td>
</tr>
<tr>
<td>Social Scale</td>
<td>117.241</td>
<td>129.881</td>
<td>137.711</td>
<td>110.001,2</td>
<td>118.601,2</td>
</tr>
<tr>
<td>Personal-Emotional Scale</td>
<td>75.95</td>
<td>77.90</td>
<td>91.063</td>
<td>75.50</td>
<td>70.80</td>
</tr>
<tr>
<td>Attachment Scale</td>
<td>106.10</td>
<td>104.65</td>
<td>103.00</td>
<td>88.25</td>
<td>101.00</td>
</tr>
</tbody>
</table>

One participant did not complete demographic form.

1 Significant at $p < .05$

2 $n = 5$ or fewer
Table 17  
Self-Definition by Ethnicity\(^3\), Gender,

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>17</td>
<td>-.05</td>
<td>.37</td>
<td>.055(^1,2)</td>
</tr>
<tr>
<td>Native American/Alaskan Native</td>
<td>5</td>
<td>-.16</td>
<td>.65</td>
<td>.683(^3)</td>
</tr>
<tr>
<td>Anglo</td>
<td>21</td>
<td>-.37</td>
<td>.49</td>
<td>.225(^4)</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>-.68</td>
<td>.57</td>
<td>.096(^5)</td>
</tr>
<tr>
<td>Latino</td>
<td>41</td>
<td>-.30</td>
<td>.54</td>
<td>.438(^6)</td>
</tr>
<tr>
<td>Men</td>
<td>23</td>
<td>-.37</td>
<td>.49</td>
<td>.247</td>
</tr>
<tr>
<td>Women</td>
<td>61</td>
<td>-.21</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Aged 29 and younger</td>
<td>70</td>
<td>-.24</td>
<td>.51</td>
<td>.244</td>
</tr>
<tr>
<td>Aged 30 and older</td>
<td>14</td>
<td>-.41</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>First Generation</td>
<td>67</td>
<td>-.25</td>
<td>.53</td>
<td>.673</td>
</tr>
<tr>
<td>Not First Generation</td>
<td>17</td>
<td>-.31</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>85</td>
<td>-.27</td>
<td>.51</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Ethnic identification compared to all others
\(^2\) \(t(82) = -1.94, p = .055\)
\(^3\)Ethnicity ANOVA \(F(3,83) = 1.52; p = .217\)

Table 18  
Self-Definition by Institution

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A(^1)</td>
<td>14</td>
<td>-.32</td>
<td>.54</td>
</tr>
<tr>
<td>School B</td>
<td>11</td>
<td>-.37</td>
<td>.61</td>
</tr>
<tr>
<td>School C</td>
<td>36</td>
<td>-.14</td>
<td>.48</td>
</tr>
<tr>
<td>School D</td>
<td>1</td>
<td>-.33</td>
<td></td>
</tr>
<tr>
<td>School E</td>
<td>20</td>
<td>-.34</td>
<td>.40</td>
</tr>
<tr>
<td>School F</td>
<td>3</td>
<td>-.56</td>
<td>1.07</td>
</tr>
</tbody>
</table>

\(F(4,79) = .842, p = .524; \text{Levene}(4,80) = 2.50, p = .049,\)

Welch not calculated due to one site with only one participant.
Table 19  
SACQ Scales by Understanding and Acceptance Groups  

<table>
<thead>
<tr>
<th></th>
<th>Changes Since College</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all n = 11</td>
<td>Somewhat n = 16</td>
<td>Both n = 49</td>
<td></td>
</tr>
<tr>
<td>Psychosocial Scale</td>
<td>240.41</td>
<td>243.44</td>
<td>245.02</td>
<td></td>
</tr>
<tr>
<td>Attachment Scale</td>
<td>103.00</td>
<td>103.44</td>
<td>106.02</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Aspirations for Graduate School</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all n = 10</td>
<td>Somewhat n = 16</td>
<td>Both n = 49</td>
<td></td>
</tr>
<tr>
<td>Psychosocial Scale</td>
<td>248.90</td>
<td>238.94</td>
<td>245.02</td>
<td></td>
</tr>
<tr>
<td>Attachment Scale</td>
<td>107.00</td>
<td>103.25</td>
<td>105.55</td>
<td></td>
</tr>
</tbody>
</table>

Table 20  
Self-definition by Understanding and Acceptance Groups  

<table>
<thead>
<tr>
<th></th>
<th>Changes Since College</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all n = 11</td>
<td>Somewhat n = 16</td>
<td>Both n = 53</td>
</tr>
<tr>
<td>Self-definition</td>
<td>-.31</td>
<td>-.45</td>
<td>-.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Aspirations for Graduate School</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all n = 10</td>
<td>Somewhat n = 17</td>
<td>Both n = 52</td>
</tr>
<tr>
<td>Self-definition</td>
<td>-.23</td>
<td>-.38</td>
<td>-.26</td>
</tr>
<tr>
<td>Test</td>
<td>Alpha</td>
<td>Effect Size</td>
<td>N</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------</td>
<td>-------------</td>
<td>----</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Sample T-test (SD)</td>
<td>.05</td>
<td>$d = .08$</td>
<td>84</td>
</tr>
<tr>
<td>Hypothesis 2 (Linear Regression)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SACQ Psychosocial by SD</td>
<td>.05</td>
<td>$f^2 = .045$</td>
<td>79</td>
</tr>
<tr>
<td>SACQ Attachment by SD</td>
<td>.05</td>
<td>$f^2 = .004$</td>
<td>79</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paired Samples T-test (UandA)</td>
<td>.05</td>
<td>$d = .01$</td>
<td>80</td>
</tr>
<tr>
<td>Hypothesis 4 (One-way ANOVA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SACQ Psychosocial by Coll U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .001$</td>
<td>75</td>
</tr>
<tr>
<td>SACQ Attachment by Coll U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .005$</td>
<td>75</td>
</tr>
<tr>
<td>SACQ Psychosocial by Grad U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .006$</td>
<td>74</td>
</tr>
<tr>
<td>SACQ Attachment by Grad U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .004$</td>
<td>74</td>
</tr>
<tr>
<td>Hypothesis 5 (One-way ANOVA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-definition by Coll U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .011$</td>
<td>78</td>
</tr>
<tr>
<td>Self-definition by Grad U&amp;A</td>
<td>.05</td>
<td>$\eta^2 = .007$</td>
<td>79</td>
</tr>
</tbody>
</table>
Figure 1
Students with College Educated Parents

Peer Expectations → Socioeconomic Status → Parent’s Education → Family Expectations

“College Student” conceived of as social role and developmental milestone → Peer and Parental value placed on education → Graduate School

Figure 2
First Generation College Students

Peer Expectations → Socioeconomic Status → Parent’s Education → Family Expectations

“College Student” conceived of as departure from expectations and delay reaching developmental milestones of working and starting a family → Increased financial burden of education → Attrition
REFERENCES


doi:10.1159/000022591


