Fall 2015

The effects of generational status on college adjustment and psychological well-being among South Asian American college students

Munni Deb
University of Iowa

THE EFFECTS OF GENERATIONAL STATUS ON COLLEGE ADJUSTMENT AND PSYCHOLOGICAL WELL-BEING AMONG SOUTH ASIAN AMERICAN COLLEGE STUDENTS

by

Munni Deb

A thesis submitted in partial fulfillment
of the requirements for the Doctor of Philosophy degree in Psychological and
Quantitative Foundations (Counseling Psychology)
in the Graduate College of
The University of Iowa

December 2015

Thesis Supervisor: Professor Elizabeth M. Altmaier

Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

_____

PH.D. THESIS

_____

This is to certify that the Ph.D. thesis of

Munni Deb

has been approved by the Examining Committee for
the thesis requirement for the Doctor of Philosophy degree in Psychological and Quantitative Foundations (Counseling Psychology) at the December 2015 graduation.

Thesis Committee: _____
Elizabeth M. Altmaier, Thesis Supervisor

_____
John S. Westefeld

_____
Gregory E. Hamot

_____
Stewart W. Ehly

_____
Timothy N. Ansley

To my pillar of strength, Atiq and the courageous women in my life- ma and Didi

Although a lotus flower grows deep beneath the muddy, murky water, it has the ability to break through the surface and fully blossom without breaking a single stem. Much like this unique flower, many first-generation college students have the resiliency and strength to overcome life obstacles and challenges and rise to their full potential.

Munni Deb

ACKNOWLEDGEMENTS

Completing my doctoral dissertation has been a major accomplishment in my graduate career. The support and faith I received from some very special people have made my professional journey toward becoming a Counseling Psychologist very meaningful.

I would like to first thank my dissertation committee, Dr. Elizabeth M. Altmaier, Professor Timothy N. Ansley, Professor Stewart W. Ehly, Professor Gregory E. Hamot, and Dr. John S. Westefeld for their time and support throughout the dissertation process. I would also like to express my deepest gratitude to my academic advisor, Dr. Altmaier for her support, guidance, mentorship, and patience. Thank you for believing in me, inspiring me, and most importantly, being my biggest advocate.

I would like to thank my family for their love and blessings. Additionally, I would like to especially thank Atiq for his unwavering love, support, patience, and encouragement throughout graduate school.

Thank you to Brad Brunick, Courtney Cornick, and Jessie Martens for seeing my potential to be a psychologist during the early phase of my doctoral training.

Finally, a very special thank you to the South Asian American community and students for their support with my dissertation.

ABSTRACT

This study examined whether first-generation South Asian American college students are different from continuing-generation South Asian American college students in their college adjustment, as measured by the Student Adaptation to College Questionnaire and their psychological well-being (PWB), as measured by the Scales of Psychological Well-Being (SPWB). The Asian population is one of the fastest growing minority groups in the United States. Despite being the third largest Asian subgroup, South Asians continue to be underrepresented within the educational and psychological literature. A review of studies shows that compared to continuing-generation college students (CGCS), first-generation college students (FGCS) are disadvantaged in terms of their demographic characteristics, pre-college preparation, knowledge about higher education, non-cognitive variables (e.g., self-esteem), and adjustment to college. Additionally, existing research shows that FGCS experience higher levels of psychological distress and lower levels of PWB. This study found that FGCS were significantly more likely to live and work off campus, have lower household incomes, and spend fewer hours per week participating in co-curricular activities than their CGCS peers. Furthermore, FGCS had lower levels of social and academic adjustment compared to their counterparts. Finally, while FGCS had lower mean scores on the SPWB than their peers, only the scores on the Personal Growth subscale were significantly different. Understanding and contextualizing the experiences of racial/ethnic minority students who are first in their family to pursue higher education will help educators and psychologists to identify, develop, and implement culturally appropriate instructional strategies,

programs, services, and treatments. Consequently, this would help nontraditional youth transition successfully into college and thrive psychologically.

PUBLIC ABSTRACT

This study examined whether there is a difference between first-generation South Asian American college students and continuing-generation South Asian American college students in their college adjustment and psychological well-being. Despite being the third largest Asian subgroup, South Asians continue to be underrepresented within the educational and psychological literature. This study found that first-generation college students (FGCS) were more likely to live and work off campus, have lower household incomes, and spend fewer hours per week participating in co-curricular activities than continuing-generation college students (CGCS). First-generation students also demonstrated lower levels of social and academic adjustment in the college adjustment measure, Student Adaptation to College Questionnaire. Additionally, in the well-being measure, Scales of Psychological Well-Being, only the Personal Growth subscale was significantly different between the two groups of students. Understanding and contextualizing the experiences of racial/ethnic minority students who are first in their family to pursue higher education will help educators and psychologists to identify, develop, and implement culturally appropriate instructional strategies, programs, services, and treatments. Consequently, this would help nontraditional youth transition successfully into college and thrive psychologically.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Although there has been a growing body of research on first-generation college students (FGCS) or students who are first in their families to pursue higher education, there continues to be a dearth of research on FGCS from racial and ethnic backgrounds. Studies examining college adjustment and psychological well-being of FGCS are particularly limited. Previous studies have found that first-generation students are more likely to come from racial and ethnic minority backgrounds than students with college-educated parents (Bui, 2002; Pike & Kuh, 2005; Richardson & Skinner, 1992; Tseng, 2004; Wang & Casteñeda-Sound, 2008; Zalaquett, 1999). Because of the growing minority population in the United States (U.S.) and because many first-generation students are children of immigrant families (Tseng, 2004), American post-secondary education institutions can expect to see a rise in the numbers of students of color who identify as FGCS.

According to the 2010 U.S. Census, the Asians and Asian-Americans make up is approximately 4.8 percent of the total U.S. population. The Asian population grew by 43 percent from 10.2 million in 2000 to 14.7 million in 2010, a growth that was more than four times faster than the total U.S. population. Furthermore, between 2000 and 2010, the Asian population increased at a faster rate than any other minority groups in the U.S. The U.S. Census defines "Asians" as people having origins in the Far East, Southeast Asia, or the Indian subcontinent, and includes individuals from countries such as Bangladesh, China, India, Japan, Korea, Malaysia, Pakistan, Thailand, and Vietnam (Hoeffel, Rastogi, Kim, & Shahid, 2010).

South Asians are the third largest Asian racial group in the U.S. (Davé, Dhinga, Maira, & Mazumdar, 2000). South Asians are the original people of the Indian subcontinent. This racial

group is not a single, homogenous group; there are significant variations between South Asian ethnic groups in terms of caste, class, language, national origin, and religion. There is some disagreement about the countries that constitute South Asia. While most scholars identify Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka as South Asian countries (Davé et al., 2000), others also recognize Afghanistan as part of the region (The World Bank, 2013).

Despite the heterogeneity within the Asian ethnic subgroups, many Asian Americans share common cultural values and beliefs. Asian cultural values and beliefs include, but are not limited to, avoidance of shame, collectivism, conformity to familial social norms and expectations, educational and occupational achievement, filial piety, maintenance of harmony, humility, and self-effacement, placing others' needs ahead of one's own, respect for authority, elders, and ancestors, and emotional self-control (Kim, Atkinson, & Umemoto, 2001; Kim, Atkinson, & Yang, 1999). According to research, adherence to these values and beliefs are likely to vary depending on the individuals' level of acculturation to the mainstream culture (Kim et al., 2001).

Although there have been clear changes in the demographic profile of the U.S. population, there has been limited inclusion of Asian Americans, especially South Asian Americans, within the educational and psychological literature that focuses on college adjustment and psychological well-being. One possible explanation for this gap may be explained by the model minority myth. According to this myth, Asian American students are perceived as well adjusted and high academic achievers (Qin, Way, & Mukherjee, 2008; Suzuki, 2002). Suzuki (2002) argues that studies that perpetuate the prevailing model minority myth often report findings based on aggregated data and less sophisticated analyses. The issue with

collapsing or aggregating research findings on any racial and ethnic group is the increased likelihood of overlooking the influence of various social and cultural factors on students' academic success and psychological functioning.

College education is recognized as a means to upward economic, financial, and social mobility. Therefore, for many students of color, a college education may be viewed as a valuable avenue to achieving a lifestyle that is free from adversity. Unfortunately, the struggles that first-generation students yearn to leave behind do not easily dissipate as they pursue higher education. Rather, they encounter academic, personal, social, and cultural challenges that impact their college-going experiences and mental health. College transition among first-generation students was best described by Richardson and Skinner (1992). These researchers found that the initial exposure to college among FGCS was viewed as a "shock that took them years to overcome" (p. 33).

Definitions

There is no universal definition of first-generation college students in the literature. Some researchers have defined FGCS as students whose parents lack college experience (Billson & Brooks-Terry, 1982; Purswell, Yazedjian, & Toews, 2008), while others have defined FGCS as students who come from families where neither parent graduated from college with a baccalaureate degree (Choy, 2001; Mehta, Newbold, & O'Rourke, 2011; Pike & Kuh, 2005). The present study expands on those definitions and describes first-generation students as students for whom neither parent has attended a college/university or earned a college degree in the U.S. or elsewhere. In contrast, continuing-generation college students (CGCS) are defined as students who have at least one parent who attended a college/university or earned a college degree in the U.S. or elsewhere. These definitions operate under the assumption that students whose parents

have some college experience are likely to have knowledge and understanding of the college-going process. As a result, children with college-educated parents are less likely to experience academic stressors, and consequently, may have better mental health than their peers who are first in their families to pursue a college education.

Theoretical Framework

The relationship between parental educational level and students' college experience may be best conceptualized using the Social Capital Theory. Social capital exists within relationships and provides access to knowledge, resources, and information that are conducive to students' educational outcomes. One of the most common sources of social capital for children is their families (Coleman, 1988), particularly their parents (Pascarella, Pierson, Wolniak, & Terenzini, 2004). For this reason, it is likely that students who are first in their family to attend college may lack necessary knowledge to succeed in college. In fact, Pascarella et al. (2004) maintain that CGCS "may have a distinct advantage over first-generation students in understanding the culture of higher education and its role in personal development and socioeconomic attainment" (p. 252). Since first-generation students are more likely to enter college with lower levels of social capital (Jenkins, Belanger, Connally, Boas, & Durón, 2013; Pascarella et al., 2004), they are more likely to struggle with the academic culture.

Background of the Problem

Studies have found a strong relationship between parental education and students' college enrollment. In an analysis of three nationally representative longitudinal studies conducted by the National Center for Educational Statistics, Choy (2001) reported that in 1992, 27% of high school graduates whose parents had a high school diploma or less enrolled in a 4-year institution, compared to 42% of high school graduates whose parents had some college experience and 71%

of high school graduates whose parents had at least a bachelor's degree. In addition, the researcher reported that first-generation students are twice as likely as their continuing-generation counterparts to attend public two-year institutions.

A review of the existing literature on FGCS enrolled in four-year institutions shows that these nontraditional students are more demographically diverse than their traditional peers from college-educated families. First-generation students are more likely to come from racial and ethnic backgrounds (Bui, 2002; Pike & Kuh, 2005; Richardson & Skinner, 1992; Soria & Stebleton, 2012; Tseng, 2004; Wang & Casteñeda-Sound, 2008; Zalaquett, 1999), are older in age and female (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996; Wang & Casteñeda-Sound, 2008), come from families with lower socioeconomic status (Bui, 2002; Mehta et al., 2011; Richardson & Skinner, 1992; Soria & Stebleton, 2012; Terenzini et al., 1996; Tseng, 2004), and work more hours per week, typically off-campus (Billson & Brooks-Terry, 1982; Mehta et al., 2011; Pascarella et al., 2004; Terenzini et al., 1996).

Research has shown that compared to CGCS, first-generation students are more likely to enter college less prepared (Bui, 2002; Mehta et al., 2011; Richardson & Skinner, 1992; Riehl, 1994; Rodriguez, 2003). This may be explained by their distinct high school experiences. During high school, FGCS are less likely to take rigorous curricula (Choy, 2001), have significantly lower high school grade point averages (GPA; Riehl, 1994), and score significantly lower on college entrance exams, such as the Scholastic Aptitude Test (SAT; Bui, 2002; Pike & Kuh, 2005; Riehl, 1994).

A review of the literature suggests differences between FGCS and CGCS in terms of social and academic adjustment, in which the former group has been found to be at a disadvantage (Billson & Brooks-Terry, 1982; Mehta et al., 2011). Compared to traditional

students, FGCS are more likely to live off campus and work longer hours per week, typically off campus, due to familial and/or financial responsibilities and obligations (Billson & Brooks-Terry, 1982; Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Pike & Kuh, 2005; Terenzini et al., 1996). These students are also significantly less involved in extracurricular and social activities (Pascarella et al., 2004), take fewer academic courses (Pascarella et al., 2004; Terenzini et al., 1996), spend less time studying (Terenzini et al., 1996), and have significantly lower GPAs (Ramos-Sánchez & Nichols, 2007; Riehl, 1994) compared to their continuing-generation peers.

Social relationship has been found to impact the quality of students' college experience. Research on levels of parental support of first-generation students has been mixed. While some studies found that FGCS receive lower levels of parental support compared to CGCS (Billson & Brooks-Terry, 1982; Choy, 2001; Sy, Fong, Carter, Boehme, & Alpert, 2011; Terenzini et al., 1996), other studies suggest that parental encouragement is an important factor for why FGCS attend college (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). In terms of peer support, FGCS are more likely to develop social relationships off campus, whereas CGCS are more likely to develop social relationships on campus (Billson & Brooks-Terry, 1982; Brooks-Terry, 1988; Hertel, 2002).

Furthermore, the literature has been inconclusive regarding academic adjustment, including college attitudes and academic outcomes among FGCS and CGCS. While some studies have found that FGCS have lower educational expectations and aspirations (Choy, 2001; Pascarella et al., 2004; Pike & Kuh, 2005; Riehl, 1994; Terenzini et al., 1996), others did not find any differences in educational aspirations and intent between FGCS and CGCS (Billson & Brooks-Terry, 1982; Purswell et al., 2008).

Choy (2001) found that regardless of students' demographic characteristics, including race and ethnicity, FGCS are twice more likely to drop out of college before completing their degree than students with college-educated parents. Similarly, in an earlier classic study on FGCS, Billson and Brooks-Terry (1982) found that compared to CGCS, FGCS were more likely to withdraw from college before completing their education due to poor "structural integration" (p. 62-65). Similar results were found in other studies, suggesting that poor college adjustment, inadequate secondary school preparation, insufficient knowledge about college, and lack of social support may place FGCS at a greater risk for attrition (Choy, 2001; Riehl, 1994). However, other studies have not found a high attrition rate among FGCS (e.g., Zalaquett, 1999).

The culmination of factors that impede students' college adjustment may also affect their psychological well-being or functioning. There is a gap in literature on positive mental health among Asian Americans (Iwamoto, 2007; Kang, Shaver, Sue, Min, & Jing, 2003), including first-generation college students (Bowman, 2010; Sy et al., 2011; Wang & Castañeda-Sound, 2008). This may be partly explained by the overemphasis on psychopathology in psychological research. Ryff and colleagues have argued that the psychological literature has historically focused on pathology, while ignoring positive well-being (Ryff, 1995; Ryff & Singer, 1996). Surprisingly, higher levels of psychological well-being have been reported for racial and ethnic groups that face greater adversity (Ryff, Keyes, & Hughes, 2003). Mehta et al. (2011) posit that first-generation students enter college with greater levels of stress and are ill-equipped to cope with the stressors of college life. Similarly, Wang and Castañeda-Sound (2008) maintain that regardless of generational status, ethnic minority students in general experience higher levels of stress and lower levels of subjective well-being than their White counterparts. Phinney and Haas (2003) found self-efficacy and social support to be the two most important variables in predicting

coping among ethnic minority first-generation college freshmen. Unfortunately, previous studies found that FGCS have significantly lower academic self-efficacy (Ramos-Sánchez & Nichols, 2007; Wang & Casteñeda-Sound, 2008) and social support (Billson & Brooks-Terry, 1982; Choy, 2001; Jenkins et al., 2013; Sy et al., 2011; Terenzini et al., 1996). These results suggest that FGCS may experience greater psychological distress and lower levels of well-being compared to their CGCS peers. In fact, in his longitudinal study, Bowman (2010) found that in contrast to CGCS, first-generation students experienced a decrease in psychological well-being during the course of their freshman year in college. Interestingly, academic and psychosocial challenges may not always lead to attrition or drop out in FGCS. For example, in a qualitative study, Rodriguez (2003) found that first-generation graduate students from poor, undereducated backgrounds with minimal to no social support, earn their bachelor's degree and "go on to lead lives of activism" (p. 17).

Although previous research found that high percentages of FGCS are more likely to come from ethnic minority backgrounds (Bui, 2002; Pike & Kuh, 2005; Richardson & Skinner, 1992; Tseng, 2004; Wang & Casteñeda-Sound, 2008; Zalaquett, 1999), these studies have tended to examine FGCS as a homogenous group, without looking at differences between them. One particular racial group that has been overlooked in the literature on college adjustment and psychological well-being is South Asian Americans. As discussed previously, this gap in research may be due to the model minority stereotype that fails to consider within- and between-group variability in academic and well-being outcomes.

Gloria and Ho (2003) found differences in the environmental, social, and psychological experiences of six ethnic groups of Asian American undergraduates (Chinese, Filipino, Japanese, Korean, Pacific Islander, and Vietnamese American). In addition, between-group variability in

academic outcomes was evident in a study that found that Southeast Asian American students had the lowest academic achievement, academic persistence, and confidence in academic pursuits compared to their Hispanic and White peers (Strage, 2000). These results support the need to consider the heterogeneity that exists within the Asian American student population.

Given the small number of studies on first-generation South Asian American college students, particularly in the areas of college adjustment and psychological well-being, this research is limited to a consideration of existing literature on Asian American students. Although South Asian American students are a unique ethnic group, studies focusing on Asian American students may help explain the lived experiences of the Asian cultural group. This is especially believed to be appropriate because previous studies have identified common values and beliefs shared by many Asian cultural groups (Kim et al., 1999; Kim et al., 2001).

On average, Asian American students excel in high school graduation rates, standardized tests, high school GPAs, and college enrollment relative to White and other ethnic minority students. This high educational achievement patterns may be explained by the Asian cultural value of educational success (Sue & Okazaki, 1990). However, despite positive academic outcomes, Asian American students are not free from academic stressors and mental health concerns. These students have been found to experience greater levels of psychological distress, such as depressive symptoms, withdrawn behaviors, and social problems compared to their White American peers (Lorenzo, Frost, & Reinherz, 2000).

Similar to previous studies that found a positive relationship between parental education and academic success of FGCS (e.g., Billson & Brooks-Terry, 1982; Choy, 2001; Terenzini et al., 1996), House (1997) found a significant correlation between parental education and the types of high school courses Asian American students took. However, Strage (2000) argues that

parental education does not always influence the quality of students' academic performance or experiences. Other factors, such as social support may mediate students' college-going processes. In fact, the relationship between social support and college success among Asian American students has been inconclusive, ranging from findings of a lack of parental encouragement (Strage, 2000) to reports of strong parental encouragement (Gloria & Ho, 2003).

Purpose of the Study

The present study seeks to address the gap in the current educational and mental health literature on South Asian American undergraduates enrolled in a two, four-year public universities. The purpose of the study is to investigate whether first-generation South Asian American college students are different from continuing-generation South Asian American college students in their college adjustment, as measured by the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1989, 1999) and psychological well-being, as measured by the Scales of Psychological Well-Being (SPWB; Ryff, 1989). The goals of this study are to close the gap in the existing literature by investigating the college-going experiences and well-being of South Asian American college students from varying ethnic groups with distinct generational status.

Significance of the Study

Despite the growing visibility of Asian American college students in post-secondary institutions, research on first-generation college students of Asian American backgrounds has been understudied. South Asian students, in particular have often been collapsed into pan-ethnic categories, such as Asian/Pacific Islander American in the literature. The significance of the current study lies in its attempt to illuminate the distinctive college experience and psychological

functioning of first- and continuing-generation college students from various South Asian ethnic groups.

The present study aims to bridge the gap in our current knowledge of first-generation South Asian American college students. It is hoped that this study will serve as a major impetus for both educators and clinicians to understand and contextualize the process of college adjustment and well-being of South Asian American college students who are first in their family to pursue a college degree. This may in turn help professionals to develop culturally appropriate and efficacious services to help nontraditional FGCS transition successfully into college and thrive psychologically.

Research Questions

To investigate the effects of generational status on college adjustment and psychological well-being among South Asian American college students, the following research questions are addressed in the current study:

1) Are first-generation South Asian American college students different from continuing-generation South Asian American college students on the four subscales of college adjustment, namely, Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Attachment, as measured by the SACQ?
2) Are first-generation South Asian American college students different from continuing-generation South Asian American college students on the six subscales of psychological well-being, namely, Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, and Self-Acceptance, as measured by the SPWB?

3) Is there a relationship between generational status and college adjustment when controlling for age, the number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and the type of student housing?
4) Is there a relationship between generational status and psychological well-being when controlling for age, gender, the number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and the type of student housing?

CHAPTER II

LITERATURE REVIEW

Chapter two has two major sections. The first section presents a review of the literature on college adjustment among first- and continuing-generation college students. This section specifically explores how pre-college experiences, institutional knowledge, levels and quality of parental and peer support, and other non-cognitive variables (e.g., self-efficacy) influence students' adjustment to college. Next, college experiences of first- and continuing-generation college students with a specific focus on their social and academic adjustment is discussed. Finally, the section concludes with a summary of the empirical literature on college adjustment of racially and ethnically diverse first- and continuing-generation college students, including students of Asian American backgrounds.

Section two focuses on psychological well-being (PWB) among first- and continuing-generation college students. First, the two distinct forms of well-being, *hedonic* and *eudaimonic* well-being are briefly defined. This is followed by a review of Carol D. Ryff's eudaimonic or psychological well-being model, which includes six dimensions. Next, the applications and limitations of the well-being model for Asian American students are described. Finally, existing research on positive psychological functioning among first-generation students is reviewed.

College Adjustment

More than ever, high school graduates today recognize the important relationship between a college degree and economic, financial, and social mobility. However, the process of pursuing a college education can be challenging and daunting for many students. In order to succeed in college, students must know how to effectively navigate various aspects of their college environment. Baker and Siryk (1999) conceptualize college adjustment as a multifaceted

process that "involves demands varying both in kind and degree and requires a variety of coping responses (or adjustments), which vary in effectiveness" (p 1). The researchers developed the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984, 1999) to assess student adjustment in four key domains, namely, academic adjustment, social adjustment, personal-emotional adjustment, and goal commitment/institutional attachment (also referred to as attachment). Baker and Siryk (1989) maintain that these unique areas, both individually and collectively, contribute to students' success in college.

Although the transition from high school to post-secondary education is arduous for many college students (Terenzini et al., 1996), a review of studies have shown that first-generation students are especially disadvantaged in their pre-college experiences, institutional knowledge, levels and quality of social support, and various other areas (e.g., self-efficacy). As a result, FGCS have been recognized as a highly vulnerable student population. In the following subsection, these characteristics are explored to better understand how they influence students' college adjustment.

Pre-college Experiences

Students' pre-college experiences can impact their knowledge about, readiness for, and persistence in post-secondary education. Riehl (1994) maintain that the quality of academic preparation contributes to students' successful transition from high school to college. A significant body of literature has documented that compared to students whose parents have earned a bachelor's or an advanced degree, students who are first in their family to pursue higher education typically enter college less prepared to succeed academically (Bui, 2002; Mehta et al., 2001; Richardson & Skinner, 1992; Riehl, 1994; Rodriguez, 2003), and this was particularly true for first-generation students enrolled in four-year institutions (Choy, 2001).

Data from a series of longitudinal studies reveal distinct secondary school experiences between first- and continuing-generation college students. In examining high school experiences of first-generation students who began at four-year institutions during the 1995-1996 academic year, Choy (2001) found that during high school, these students were less likely to follow a rigorous curriculum, enroll in calculus courses, take SAT or ACT examinations, or complete advanced placement tests compared to their peers with college-educated parents. An additional longitudinal study investigating differences in pre-college characteristics between first- and continuing-generation college students found that compared to traditional students or CGCS, FGCS had lower levels of peer and teacher engagement in high school and initial lower critical thinking skills (Terenzini et al., 1996). Although not longitudinal, other studies found that FGCS had significantly lower SAT scores (Bui, 2002; Riehl, 1994) and high school great point average (GPA; Riehl, 1994) than their counterparts.

Institutional Knowledge

Inadequate pre-college preparation may cause students to have limited knowledge about post-secondary institution and the college-going process. Studies have suggested that compared to students with college-educated parents, students who are first in their family to attend college encounter a variety of issues during their transition to college (Pascarella et al., 2004; Terenzini et al., 1996). In examining the first-year experiences of first- and continuing-generation college students at a four-year university, Bui (2002) found that FGCS have less familiarity with the social environment of the university compared to their peers whose parents had some college experience or at least a bachelor's degree. In addition, Pascarella et al. (2004) maintain that FGCS "are more likely to be handicapped in accessing and understanding information and attitudes relevant to making beneficial decisions about such things as the importance of

completing a college degree, which college to attend, and what kinds of academic and social choices to make while in attendance" (p. 252). Similarly, other studies have found that first-generation students lack knowledge in selecting appropriate institutions, and once they enroll in college, they have limited understanding of how to effectively manage their time and access valuable academic resources (Brooks-Terry, 1988; Richardson & Skinner, 1992). Non-cognitive factors, such as levels and quality of social support also vary among FGCS and CGCS.

Social Support

Parental Support. Studies have shown that family support is negatively correlated with students' academic stress level (Jenkins et al., 2013; Wang & Casteñeda-Sound, 2008). However, literature on the effects of parental support on college adjustment among FGCS has been mixed. A number of studies found that compared to their peers, FGCS perceive their parents to be less supportive and encouraging (Billson & Brooks-Terry, 1982; Choy, 2001; Terenzini et al., 1996). In contrast, Saenz et al. (2007) found that first-generation students view parental encouragement as an important reason for attending college. These researchers argue that although parents of FGCS may lack personal college experience, they continue to play an important role in shaping their children's orientation and aspiration toward higher education. Although Purswell et al. (2008) found no significant differences in social support from parents between FGCS and CGCS, the researchers stated that social support is a predictor of academic behaviors for continuing-generation students only.

The types of support received by students may be indicative of how well students adjust to and perform in college. Dennis, Phinney, and Chuateco (2005) examined the contribution of two types of parental support, family support and family resources needed for academic success of ethnic minority first-generation students of Latino and Asian backgrounds. The study

participants were asked about their perception of parental support (i.e., family members are supportive or would be supportive in helping students cope with college-related distress) and perceived lack of needed family support (i.e., students' perception of lacking needed support and resources from their family) when experiencing stress. Results indicated that students who reported lacking parental support and needing it had lower scores on college adjustment, cumulative GPA, and college commitment.

In a seminal work on first-generation students, Billson and Brooks-Terry (1982) found that unlike FGCS, CGCS received various types of parental support, including emotional, financial, homework, and transportation. Additionally, Sy et al. (2011) found that first-generation female college students had lower levels of emotional and informational support from their parents than their continuing-generation female college peers. These data suggest that CGCS are more likely to benefit from various types of parents support, which may contribute to how well they may adjust to college.

Peer Support. Peer support has also been found to facilitate a successful transition to college. Available research suggests that peer support is instrumental and a strong predictor for college grades and adjustment (Dennis et al., 2005; Hertel, 2002; Richardson & Skinner, 1992). Hertel (2002), for example, found that perceived support from college friends predicted overall college adjustment, including social adjustment, significantly better for CGCS than for FGCS. In contrast, in their investigation of academic intentions, parental support, and peer support as predictors of academic behaviors of 329 first- and continuing-generation college freshmen, Purswell et al. (2008) found that although FGCS indicated similar levels of perceived peer support as CGCS, such support was not predictive of their academic behaviors. The researchers

concluded that it is not the amount of support that predicts students' academic behaviors, but how students make use of such relationships.

Existing research has also found that first- and continuing-generation students vary in their on and off campus support. Studies have found that continuing-generation students are more likely to engage socially and develop important relationships on campus, whereas FGCS are more likely to socialize and develop meaningful friendships off campus (Billson & Brooks-Terry, 1982; Brooks-Terry, 1988). Similarly, Hertel (2002) found that continuing-generation students reported higher support from college enrolled friends, whereas first-generation students reported higher support from friends who are not enrolled in college.

Research evidence indicates that continuing-generation students are advantaged in terms of the various types of support they receive from their parents and valuable peer relationships they develop on campus. As a result, these students may have a more positive college experience than their peers who are first in their family to pursue a college education. In addition to social support, other non-cognitive variables, such as self-esteem and perceived discrimination have also been linked to how well students adjust to college.

Other Non-cognitive Variables

Non-cognitive factors, such as academic self-efficacy and the institutional environment can further impact students' adjustment to college. In their longitudinal research, Ramos-Sánchez and Nichols (2007) found that traditional college students had significantly higher self-efficacy scores and performed academically better than their first-generation comparison group. Although self-efficacy did not mediate the relationship between generational status and students' GPA, the research findings highlight the influence of academic self-efficacy on students' success in coping with various educational demands. Research has been inconsistent on the effects of

self-esteem on college adjustment among first- and continuing-generation college students. Wang and Casteñeda-Sound (2008), for example, found self-esteem as the single most important predictor of psychological well-being among FGCS. However, other scholars have not found a significant difference between first- and continuing-generation college students with respect to self-esteem (e.g., Aspelmeier, Love, McGill, Elliott, & Pierce, 2012; Hertel, 2002).

Conflicts between students' demographic characteristics and the institutional culture have been shown to decrease students' academic engagement and increase attrition rates. High tuition costs may elicit financial discomfort and cause low-income college students to drop out or transfer out early in their academic career (Billson & Brooks-Terry, 1982). In addition, first-generation students have been found to have a less favorable perception of their college environment (Pike & Kuh, 2005). Soria and Stebleton (2012) found a positive relationship between first-generation students' sense of belonging on campus and academic engagement (i.e., frequency with which students interacted with faculty, contributed to classroom discussions, engaged in class by asking questions) during their first year in college. Furthermore, in their analyses, Terenzini et al. (1996) found differences in the perception of the institutional climate between FGCS and CGCS, in which the former group was more likely to encounter discrimination based on race, ethnicity, or gender. Sense of belonging and experience of personal discrimination in an academic environment have been correlated with college attrition for many first-generation ethnic minority students (Richardson & Skinner, 1992).

Pre-college experiences, institutional knowledge, levels and quality of social support, and various non-cognitive factors may individually or collectively influence how well students adjust socially and academically to their college environment. The following subsection examines the social and academic adjustment of first- and continuing-generation college students.

College Experiences

Transitioning from high school to college is a major source of stress for many college aged students. Unfortunately, for some students the ability to cope with the interpersonal and educational demands inherent in the college-going experience may be more challenging as a result of their generational status in terms of education.

Social Adjustment. Social adjustment refers to students' ability to cope with the interpersonal-societal demands that are characteristics of the college-going experience (Baker & Siryk, 1989). Students' residency and employment statuses, in conjunction to students' demographic characteristics may influence how well students socially adjust to their college environment.

Previous studies have shown the difference in the quality of students' social adjustment based on their living location. Billson and Brooks-Terry (1982) contended that residing on campus is key to successful structural integration or the "extent to which the student is tied into various facets of campus life, beyond attending classes" (p. 62). Furthermore, students living on campus are found to be more socially and academically engaged, and to experience higher levels of gains in both their learning and intellectual development (Pike & Kuh, 2005). Studies have shown that FGCS are more likely to live off campus, typically at home with their family, whereas CGCS are more likely to live on campus, such as in residence halls (Billson & Brooks-Terry, 1982; Pascarella et al., 2004; Pike & Kuh, 2005). Living at home has been found to impede students' social and structural integration process. Brooks-Terry (1988), for example, found that students who live at home have household and kinship responsibilities, which often preclude them from committing time to on-campus activities. As a result, first-generation students are less likely to establish important social relationships that are conducive to college.

In fact, Pike and Kuh (2005) found that FGCS who live off campus have significantly lower levels of social engagement and integration compared to their CGCS peers.

Financial distress is an additional variable that has been shown to impede students' social adjustment. Studies have shown that compared to continuing-generation students, FGCS are more likely to work longer hours per week, typically off campus due to financial obligations (Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Terenzini et al., 1996). Working off campus removes students from their academic environment and further inhibits their social integration (Billson & Brooks-Terry, 1982). For many first-generation students, the experience of living at home and working long hours due to familial and/or financial responsibilities deter them from developing valuable college-related social relationships that typically occur through peer interactions and on-campus involvement.

Because first-generation students are more likely to work more hours than their peers from college-educated families, they are less involved in on-campus activities (Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Pike & Kuh, 2005; Richardson & Skinner, 1992). Students' involvement in co-curricular activities on and around campus has been linked to positive college-going experiences and outcomes. For example, in their analyses of the National Study of Student Learning (NSSL) data, Pascarella et al. (2004) found that compared to traditional students, FGCS who participate in extracurricular activities in college have shown to have greater outcome benefits in critical thinking, degree plans, sense of control, and preference for higher-order cognitive tasks. Unfortunately, when first-generation students come to campus, it is primarily to attend classes (Richardson & Skinner, 1992). Factors that hinder social relationships among first-generation students have also been shown to impact these students' academic adjustment (Mehta et al., 2011).

Academic Adjustment. Academic adjustment refers to students' ability to cope with the various academic demands inherent in the college-going experience (Baker & Siryk, 1986, 1989). Students' levels of motivation, reasons for pursuing post-secondary education, and academic attitudes may help illuminate the unique in- and out-of-class differences between first- and continuing-generation college students.

Students' cultural orientation has been found to influence academic motivation. Students from Western cultures, for example, endorse individualistic motivations. These motivations include "personal interest, intellectual curiosity, and the desire to attain a rewarding career." In contrast, students with collectivistic orientations are motivated to pursue higher education "in order to meet the expectations of the family" (Dennis et al., 2005, p. 224-225). The effect of these differences in values was evident in a study conducted by Bui (2002) who investigated the reasons why first- and continuing-generation students pursue higher education. Bui (2002)'s study included a high percentage of first-generation Asian-American participants. Results showed that compared to CGCS, FGCS gave higher ratings to bringing honor to the family and helping family financially after graduation as important reasons for pursuing a college degree.

Studies on college attitudes have been mixed. While some data suggests that first-generation students have lower persistence and graduation rates (Choy, 2001; Pascarella et al., 2004; Pike & Kuh, 2005; Riehl, 1994; Soria & Stebleton, 2012; Terenzini et al., 1996), other studies have not found the attitude or intentions of FGCS to be significantly different to their peers with college-educated parents (Billson & Brooks-Terry, 1982; Purswell et al., 2008). Billson and Brooks-Terry (1982), for example, found no significant differences between first- and continuing-generation students with respect to their educational goals, intellectual and personal growth, career preparation, independence, motivation for obtaining a degree, and

prestige/success/upward mobility. It is important to note, however, that the results found by Billson and Brooks-Terry (1982) may be explained by the types of institutions the research participants were sampled from. Although the researchers used a large sample size (N=701), the subjects were recruited from a residential private liberal arts college and a primarily commuter state-supported liberal arts college. Despite the high cost of attendance at private colleges, such academic institutions offer smaller class sizes, emphasize academic excellence, have easy access to various resources (e.g., professors), and offers other academic benefits. It is also likely that students enrolled in private institutions come from families with higher household incomes, and educational expectations and aspirations to attend college. Therefore, the findings need to be carefully considered before generalizing it to students enrolled in public institutions.

As discussed previously, various factors, such as living with family, working longer hours off campus, and minimal campus involvement may not only impact students' social relationships, but also their academic performance. It has been found that FGCS are more likely to give priority to their jobs when there is a conflict between work hours and course-related assignments compared to CGCS (Billson & Brooks-Terry, 1982). In addition, academic self-efficacy also impacts the quality of students' academic adjustment and college-going experiences (Pascarella et al., 2004; Terenzini et al., 1996).

First- and continuing-generation students have been found to vary in their academic involvement (Soria & Stebleton, 2012). In their analysis of the National Study of Student Learning (NSSL) data, which was a three year, longitudinal, national study of approximately 4,000 new students, Terenzini et al. (1996) found that FGCS took fewer courses in humanities and fine arts, completed fewer total credit hours during their first academic year, and spent fewer hours per week studying compared to their CGCS peers. Pascarella et al. (2004) investigated the

same NSSL data to examine the second- and third-year college gains. These researchers also found that FGCS completed significantly fewer credit hours across three years relative to students whose parents had higher levels of post-secondary education. Furthermore, Soria and Stebleton (2012) found that first-generation undergraduates were less likely to contribute to classroom discussions, ask questions in class, and interact with faculty.

Although first-generation students face multifaceted challenges once enrolled in college, research findings have not consistently shown that these students always exhibit poor academic or cognitive outcomes. In their longitudinal studies, Terenzini et al. (1996) did not find a difference in first-year gains in mathematics or critical thinking abilities between first- and continuing-generation college students. Moreover, Pascarella et al. (2004) found small, chance differences between the two groups of students in their second-year writing skills, third-year reading comprehension, and third-year critical thinking. In addition, Pascarella et al. (2004) found that at the end of the second year of college, FGCS had modestly lower levels of science reasoning and learning for self-understanding than CGCS. While previous studies have reported that FGCS earn lower college grades (Billson & Brooks-Terry, 1982; Pascarella et al., 2004; Ramos-Sánchez & Nichols, 2007; Riehl, 1994) and a take longer time to complete their programs (Terenzini et al., 1996), other studies did not find significant differences in grades between first- and continuing-generation students (Aspelmeier et al., 2012; Strage, 2000).

McMurray and Sorrells (2009) argued that "students do not exist as a monolithic entity and they are not neatly categorized. Rather, they are individuals that come from various cultures; and each culture invariably impacts these students profoundly" (p. 210). Because majority of the first-generation students are racially and ethnically diverse, a review of literature on college adjustment of minority students is crucial.

College Adjustment among First-Generation Racial and Ethnic Minority Students

In their in-depth interviews of 107 African American, Hispanic, and Native American baccalaureate recipients, of whom 58 % were FGCS, Richardson and Skinner (1992) found that first-generation graduates were less prepared for college and had poor understanding of the value of education. As a result of multiple responsibilities, these nontraditional students were less involved on campus and had minimal interactions with their peers and instructors. Their college experience was described as "less continuous" (p. 35). In other words, first-generation students were more likely to attend college part-time, to transfer out, withdraw, and re-enroll repeatedly. While Richardson and Skinner's (1992) study did not focus on undergraduate students, the research findings demonstrate that although first-generation minority students face a myriad of problems related to college adjustment, they go on to pursue graduate school.

Aspelmeier et al. (2012) investigated the role of generational status as a moderator of the relationship between psychological factors (self-esteem and locus of control) and college outcomes (college adjustment and GPA) among 322 undergraduate students from a public four-year university (mean age of 18.24 years). The majority of the participants identified themselves as Caucasian/European American (85%), followed by African American (6.2%), Multi-Ethnic (2.5%), Pacific-Islander American (2.2%), Hispanic American (1.6%), East/Southeast-Asian American (1.2%), Middle-Eastern/North-African American (.3%), and others (.9%). The study used the SACQ measure to assess students' college adjustment. The researchers did not find a significant difference in terms of college adjustment, GPA, and self-esteem between first- and continuing-generation students. In addition, while generational status operated as a sensitizing factor, which heightens both positive and negative college outcomes, in some situations, it served as a risk factor. For instance, although having higher self-esteem benefited FGCS and CGCS

equally, having lower self-esteem resulted in lower scores in the Personal-Emotional Adjustment subscale of the SACQ for FGCS only. Aspelmeier et al. (2012) contend that consistent with previous studies that found small effect sizes between FGCS and CGCS in terms of college outcomes, the differences between the two groups of students in their study were also small. The study's use of a small sample size and the self-report methodology may have impacted the study results and conclusions.

Mehta et al. (2011) explored factors contributing to academic failure among first-generation students. The researchers identified the needs, attitudes, behaviors, and perceptions of 452 first- and continuing-generation university students who identified as African Americans, Hispanics, Whites, and other racial groups. First-generation college students reported significantly lower levels of social and academic satisfaction. Consistent with previous studies (e.g., Bui, 2002; Richardson & Skinner, 1992; Terenzini et al., 1996; Tseng, 2004), Mehta et al. (2011) found that FGCS come from families with lower household incomes and have greater financial commitments and demands on their time. Interestingly, no significant difference was found between the two groups in terms of work hours, which is inconsistent with past studies (e.g., Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Terenzini et al., 1996). In addition, no significant differences were found for commuting status and the extent of social involvement between the two groups of students. These non-significant research findings may be explained by the study's methodology. The research used a cross-sectional methodology and the recipients were recruited from a single university, which had a high percentage of commuter students and a large percentage of employed students (Mehta et al., 2011). The academic setting in which the participants were recruited from may explain some of the research results.

As noted in Chapter one, there is a research gap on studies focusing on college adjustment among Asian American, including South Asian American college students. Studies focusing on college experiences and adjustment have either excluded Asian American students from the sample or pooled Asian American students with other minority groups due to the study's small overall sample size. The following subsection will provide a brief overview of how the general Asian American college student population adjusts to college. Although the experience of Asian American college students may not accurately represent how first- and continuing-generation South Asian American college students adjust to college, it may offer a basis for understanding the experiences of this racial group. The subsection will conclude with a summary of college adjustment studies that include a subsample of first- and continuing-generation Asian American students.

College Adjustment among Asian American Students

This section explores the literature on college experiences of Asian American college students, with a specific focus on the parental educational level, levels of social support, impact of cultural values, and other non-cognitive variables.

Although Asian American students demonstrate high academic performance compared to students from other racial and ethnic groups (Lorenzo et al., 2000; Sue & Okazaki, 1990), they nevertheless experience academic issues that are common to all college students. In fact, Liang and Sedlacek (2003) reported that on average, first-year Asian American college students cognitively and behaviorally avoid or withdraw from stressful situations and problems. Similarly, Lorenzo et al. (2000) found that Asian American adolescents have higher levels of depressive symptoms, withdrawn behavior, and social problems compared to White adolescents. Although the study by Lorenzo et al. (2000) did not focus on college students, the research

findings show that despite excelling in academics, Asian American adolescents have lower psychosocial functioning than their White peers.

Parental Education. Research findings also show a relationship between parental education and high school curriculum of Asian American students. House (1997) found that Asian American college students who took more academic courses during high school had parents with higher education levels. Previous studies have found a positive relationship between parents' education and academic persistence and performance among first-generation college students from different racial and ethnic backgrounds (e.g., Billson & Brooks-Terry, 1982; Choy, 2001; Terenzini et al., 1996). Interestingly, parents' educational level may not always impact the college-going process of first-generation students, including students from Asian American backgrounds. In fact, research found that although parents' educational level is correlated with their children's academic success, such as GPA (Strage, 2000; Terenzini et al., 1996), it is not always associated with students' confidence, persistence, and task involvement in college (Strage, 2000). Similarly, House (1997) did not find a significant correlation between students' academic self-concept and their parents' educational level. Therefore, it is possible that other significant variables, such as cultural values and social support may influence the quality of students' adjustment to college.

Cultural Values. Asian American students' high educational achievement level has been explained by their familial and cultural emphasis on academic success, upward mobility, and respect for education (Lorenzo et al., 2000; Sue & Okazaki, 1990). Cultural beliefs and expectations about the value of education were evident in a study conducted by Bui (2002). Bui (2002) investigated reasons why FGCS and non-FGCS of diverse ethnic and racial groups (Asian, Black, Latino, White, and students from other racial backgrounds) pursued college.

Results showed that compared to non-FGCS, FGCS endorsed gaining respect and status, bringing honor to the family, and helping their families financially as principal reasons for pursuing a college degree. The high numbers of first-generation Asian American college students in the sample may explain the collectivistic motivation for educational achievement.

Tseng (2004) found that Asian Pacific, African/Caribbean, Latino, and European-American students from immigrant families had greater academic motivations than their U.S.-born peers. The result was attributed to the group's strong family obligation attitudes. In addition, in her exploration of predictors of college adjustment and success among 150 Southeast Asian American, Hispanic, and White students, Strage (2000) found differences in family values between the three groups of students. Parents of Southeast Asian American students underscored the importance of bringing honor to the family through education. Interestingly, the perception of bringing honor to the family was negatively correlated with college GPA and task involvement among the Southeast Asian American student sample. Furthermore, these students were found to be less confident, less persistent, and less task-involved than their Hispanic and White peers. The research results demonstrate that cultural and familial expectations for education may not necessarily lead to better academic performance among Asian American college students.

Social Support. Previous studies on the effects of social support on college experiences have yielded inconsistent results. On one hand, in predicting college adjustment and success, Strage (2000) found that compared to Hispanic and White students, Southeast Asian American college students reported receiving less parental emotional support and having parents who were less encouraging of their independence. On the other hand, in a study conducted by Gloria and Ho (2003), a high percentage of Asian American undergraduates reported that their parents (88%

of the mothers and 81% of the fathers) provided strong encouragement. Furthermore, data analysis showed that although comfort in the university environment, social support, and self-beliefs were significantly correlated with academic persistence, the social support variable was the strongest predictor among the Asian American college students.

Non-cognitive Variables. The relationship between academic attitudes (e.g., academic self-esteem and achievement expectancies) and academic achievement of Asian American students in post-secondary education has received some attention in the literature. Gloria and Ho (2003), for example, found that self-beliefs and comfort with the campus environment explained academic persistence among Asian American undergraduates. The researchers concluded that a sense of cultural congruity and a positive perception of the university context were significantly related to students' overall self-esteem and academic self-efficacy (i.e., college and educational degree behaviors). Similarly, House (1997) found that academic self-concept (i.e., academic ability, drive to achieve, mathematical and writing ability, and self-confidence in intellectual activities) and achievement expectations were significant predictors of the academic performance of 378 Asian American undergraduate students (mean age of 18.32 years).

The aforementioned studies shed light on the influence of parents' educational level, Asian cultural values, social support, and non-cognitive variables on college experience and college adjustment among the Asian American student population. In the next subsection, empirical research on college adjustment among first- and continuing-generation racial and ethnic minority students, including students of Asian American background is reviewed.

College Adjustment among First-Generation Asian American Students

In the past decade, a number of studies have utilized the SACQ to examine how well racial and ethnic minority students adjust to college. As mentioned previously, although no

recent studies have exclusively focused on Asian American students, a few have included either a small sub-sample of Asian American participants or aggregated the study sample. In the following subsection studies that have used the SACQ to explore college adjustment among a sample of first-generation Asian American college students will be explored.

Hertel (2002) sought to investigate similarities and differences between first- and continuing-generation college students (N=130; mean age of 18.36 years). The researcher used the SACQ to measure students' adjustment to college. The data were analyzed using multiple regression analyses and between-group *t*-tests. Results showed that CGCS reported significantly higher parental incomes and better social adjustment than FGCS. Furthermore, perceived support from college friends predicted overall adjustment significantly better for CGCS. Lastly, the two variables, self-esteem and on-campus support predicted college adjustment for the entire sample. The study's findings need to be considered in the context of its methodological limitations. The study had a low response rate and a small number of first-generation participants (19%). In addition, the participants were predominately Caucasian (86%), with a small minority sample (Asian American students comprised of 4% of FGCS and 5% of CGCS). Finally, the majority of the participants in the study lived on campus (94%). Although Hertel's (2002) study was one of the earliest studies to examine similarities and differences between first- and continuing-generation college students using the SACQ, the findings may not be generalizable to first-generation racial and ethnic minority college students.

Dennis et al. (2005) conducted a longitudinal study investigating the influence of personal motivational characteristics and environmental social supports on college outcomes (i.e., cumulative GPA, college adjustment, and college commitment). The sample consisted of 100 first-generation Latino (84%; all Mexican or Central American) and Asian (16%; all Chinese

or Chinese/Vietnamese) college students (mean age of 19.02 years) who attended an ethnically diverse urban commuter university on the West Coast. Multiple regression analyses, ordinary least squares regressions, and *t*-tests were performed to analyze the data. The results showed that college outcomes were related to student's perception of the amount of family and peer resources they needed and their perception of the family and peer support that were available. A significant correlation was found between students' perception of family resources needed and college outcomes. However, this relationship disappeared when other variables were controlled. In contrast, perception of peer resources needed continued to remain significant even when the other variables were controlled. Moreover, career/personal motivation predicted college adjustment, including high school GPA. Due to the small percentage of Asian American students, differences between ethnic groups were difficult to examine. Additionally, the predictor variables were based on self-report measures and the majority of the participants were recruited from a single urban commuter institution (Dennis et al., 2005). Despite the study limitations, the research findings highlight the function of social support and student motivation on college adjustment among racially and ethnically diverse college students.

In a single-institution study, Ramos-Sánchez and Nichols (2007) conducted a mediation path analysis to examine whether self-efficacy mediates the relationship between generational status in terms of education and two outcome variables, academic adjustment and college GPA. The study included 192 incoming freshmen (mean age of 18.24 years) at a private liberal arts university on the West Coast. Contrary to the researchers' hypothesis, a mediation effect was not found for academic performance or college adjustment. In contrast to past findings that have concluded that FGCS do not always perform poorly academically (Pascarella et al., 2004; Terenzini et al., 1996; Zalaquett, 1999), Ramos-Sánchez and Nichols (2007) found that

traditional students performed better academically than FGCS. More specifically, first-generation students had significantly lower GPAs and self-efficacy compared to their counterparts. The findings must be considered cautiously due to the study's limitations. The participants were recruited from a private university, which limits the generalizability of the results to public institutions. The results were also based on small sample of FGCS (33.3%) and Asian American or Pacific Islander students (20.3%). Lastly, the study relied on truncated measures, including the SACQ. This may have compromised the reliability and validity of the findings (Ramos-Sánchez & Nichols, 2007).

Tseng (2004) investigated the effect of family interdependence on academic adjustment of 998 first- and continuing-generation college students (mean age of 20 years) from a single university. The students were from immigrant and U.S.-born families and identified themselves as Asian Pacific, African/Caribbean, Latino, and European-American.

The research findings revealed that strong family obligations or family demands negatively impacted student achievement. More specifically, students from immigrant families with family obligations spent more time caring for and assisting their families while neglecting their academic needs and responsibilities. Consistent with previous studies on collectivistic motivations, Asian Pacific participants from immigrant families were found to place more value on family and had greater familial demands than their European-American counterparts (Tseng, 2004). Although the study by Tseng (2004) did not use the SACQ, the findings shed light on how familial responsibilities impact college-going experiences of first-generation Asian American immigrant students.

Summary

First-generation college students face unique challenges compared to their peers with college-educated parents. A review of the literature shows that FGCS are disadvantaged in terms of their demographic characteristics, pre-college preparation, and knowledge about higher education, as well as other non-cognitive variables. However, studies have been inconsistent about the impact of social support on students' adjustment to college. Furthermore, first- and continuing-generation students have distinct social and academic adjustment experience. Socially, first-generation students are more likely to live off campus and work longer hours-typically off campus. As a result, they are less likely to be involved in co-curricular activities on and around campus which has been found to be essential for social adjustment. Moreover, studies on academic adjustment have been mixed. For instance, studies on attitude differences have not consistently found that FGCS have lower persistence, educational expectations, aspirations, or plans than CGCS. Also, studies have not consistently found that FGCS always have poor academic outcomes (e.g., college GPA) compared to their CGCS peers.

The challenges associated with academic and social adjustment may not only impact students' academic success, but also their psychological well-being.

Psychological Well-Being

As discussed earlier in this chapter, first-generation college students experience unique academic, social, and cultural challenges compared to continuing-generation college students. These experiences have been found to increase students' risk of mental health problems. Bowman (2010) found that high school GPA, college degree aspirations, involvement in co-curricular activities, and interpersonal relationships impact psychological well-being of first- and continuing-generation college freshmen. Since previous studies have shown that FGCS have

difficulties adjusting to college, they are more likely to exhibit lower levels of positive mental health compared to their CGCS peers. Unfortunately, to date, no studies have examined positive functioning of first-generation South Asian American undergraduates.

Historically, the psychological literature has focused on psychopathology, while overlooking positive mental health (Ryff, 1995; Ryff & Singer, 1996). However, over the past decade, there has been an increase in empirical studies on PWB, particularly within clinical and counseling psychology (Lent, 2004). Despite the growing body of literature on well-being, no studies have focused on positive psychological functioning of Asian American students (Iwamoto, 2007; Jenkins et al., 2013; Kang et al., 2003) and FGCS (Sy et al., 2011; Wang & Castañeda-Sound, 2008). In the current subsection, the conceptualization of well-being is discussed. This is followed by a review of major tenets and limitations of Carol D. Ryff's PWB model. Finally, the section concludes with an overview of empirical literature on well-being of FGCS.

Conceptualizations of Well-Being

There are two divergent, yet related perspectives, each with unique philosophical roots that guide the formulation of well-being. According to Ryan and Deci (2001), the traditions of hedonic and eudaimonic well-being "are founded on distinct views of human nature and of what constitutes a good society. Accordingly, they ask different questions concerning how developmental and social processes relate to well-being, and they implicitly or explicitly prescribe different approaches to the enterprise of living" (p. 143). From these two traditions emerged two different operational definitions of well-being: hedonic or subjective well-being (SWB) and eudaimonic or psychological well-being (PWB).

Hedonic or SWB includes "global evaluations of affect and life quality" (Keyes, Shmotkin, & Ryff, 2002, p. 1007). This tradition conceptualizes well-being in terms of overall life satisfaction (or happiness), positive affect, and the absence of negative affect (Lent, 2004). In contrast, eudaimonic or PWB explores "perceived thriving vis-à-vis the existential challenges of life (e.g., pursuing meaningful goals, growing and developing as a person, establishing quality ties to others)" (Keyes et al., 2002, p. 1007). According to Lent (2004), growth, meaning, purpose, and self-actualization are the major facets of the PWB tradition.

Scholars have critiqued the hedonic tradition for its view of well-being. Ryff (1989), for example, argue that early formulations of well-being, such as happiness and life satisfaction have "limited theoretical grounding" and consequently, they neglect critical features of psychological functioning (p. 1077). Lent (2004) further discuss the limitations of the hedonic perspective of well-being. He contends that although some things may "feel good in the moment" and bring happiness, they may not necessarily be healthy (p. 486). From the eudaimonic viewpoint, "people are not only motivated to experience happiness and to minimize stress, they are also driven to achieve goals that, somewhat paradoxically, may entail creating stressful states for themselves or enduring long intervals without tangible reinforcement." As such, this perspective "captures the potential tension between happiness and growth" (p. 486).

Ryff's conceptualization of PWB closely aligns with the eudaimonic tradition. By drawing on the views of developmental, clinical, and mental health theorists, Ryff developed a multidimensional instrument of well-being called, Scales of Psychological Well-Being (SPWB, Ryff, 1989). In contrast to the hedonic view, Ryff's PWB describes well-being as "the striving for perfection that represents the realization of one's true potential" (Ryff, 1995, p. 100). Ryff's construct not only considers the absence of negative psychological outcomes, but the presence of

positive psychological functioning (Ryff & Singer, 1996). Because first-generation students encounter a host of unique challenges as they transition from high school to college (Terenzini et al., 1996) and Ryff's SPWB assesses well-being in a wide range of contexts and at different stages of development (Bowman, 2010), it is particularly useful for this study.

The Six Dimensions of Psychological Well-Being

Ryff's SPWB includes six theory-guided dimensions which, taken together encompass a "breadth of wellness." The six dimensions are autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff & Keyes, 1997, p. 720).

The Autonomy subscale represents qualities such as "self-determination, independence, and the regulation of behavior from within" (Ryff, 1989, p. 1071). Individuals high on this subscale are described as functioning autonomously and resisting enculturation. They have an internal locus of evaluation which is based on personal standards and not seeking approval from others. Self-actualizers also avoid conforming to societal standards on how to behave and think. In contrast, individuals who are low on this dimension tend to conform to social expectations and are more likely to make important decisions based on how others evaluate them (Ryff, 1989).

The Environmental Mastery subscale examines "the individual's ability to choose or create environments suitable to his or her psychic condition" (Ryff, 1989, p. 1071). Individuals high on this dimension are competent in managing and manipulating their environment in order to meet their personal needs and values. They are also able to effectively identify and use available opportunities. Conversely, individuals who are low on this index are less aware of existing opportunities in their environment and are less able to modify it. Consequently, they experience difficulty managing daily responsibilities (Ryff, 1989).

The Personal Growth subscale assesses a person's ability to develop his or her potential, expand, and grow as a developing person. Individuals who are actualized within this dimension have a sense of continued development; they have the ability to perceive themselves as growing and are aware of their potential to change and to learn. In addition, these individuals are open to new experiences, which tend to optimize their development. In contrast, individuals who are low on this index are less interested in developing, growing, or changing. They experience personal stagnation, whereby they are unable to develop new attitudes or behaviors (Ryff, 1989).

The index, Positive Relations with Others measures individuals' ability to create and maintain positive relationships with other. This dimension has been recognized as a key feature of mental health. Individuals who are self-actualized within this subscale are described as having warm, satisfying, and trusting relationships with others. Furthermore, such individuals are concerned for the welfare of others and demonstrate empathy and affection. They also understand the reciprocal nature of relationships. In contrast, individuals who are low on this dimension have few intimate, trusting relationships. They experience difficulty being warm, open, and empathetic toward others, and are also resistant to compromising with others. As a result, such individuals feel frustrated and isolated in their interpersonal relationships (Ryff, 1989).

The dimension Purpose in Life considers people's beliefs about their lives as purposeful and meaningful. Individuals who are high on this index have goals and objectives, in addition to a sense of directedness. Individuals low on this domain lack a sense of directedness and meaning in life. Such individuals may have limited goals and may not understand how their past events impact their current lives (Ryff, 1989).

Finally, the dimension Self-Acceptance is the most commonly criterion of well-being mentioned by previous theorists. According to Ryff (1989), self-acceptance is a "central feature of mental health as well as characteristics of self-actualization, optimal functioning, and maturity" (p. 1071). Life-span theorists further describe self-acceptance as an individuals' ability to accept themselves and their past experiences. Individuals who score high on this index hold positive attitudes about their past and present, and accept both positive and negative aspects of themselves. In contrast, individuals who score low on this domain desire to be different because they are dissatisfied with their personal attributes and their past and present lives (Ryff, 1989).

Limitations and Applications of the Psychological Well-Being Model

Research using Ryff's SPWB measure on adults have shown a relationship between PWB and various outcomes, including increased social support, greater life satisfaction, and improved physical health (for a review, see Bowman, 2010). Although there is limited research examining well-being among college students using the SPWB measure, there have been a few empirical studies that support positive mental health in younger age populations. For example, in an early SPWB validation study, Ryff (1989) looked at age patterning and sex differences along the six dimensions of the SPWB. In her comparison of young (18-29 years old; n=133), midlife (30-64 years old; n=108), and older-aged (65 years old or older; n=80) adults (N=321), Ryff found incremental increases in autonomy and environmental mastery (particularly from young adulthood to midlife) and decreases over time in personal growth and purpose in life (particularly from midlife to old age). However, no age differences were found for positive relations with others or self-acceptance.

Constantine and Sue (2006) maintain that optimal psychological functioning cannot be separated from an individual's cultural context. Scholars have argued that the conceptualizations of positive psychology are rooted in the larger society's values and are therefore, culture bound (Constantine & Sue, 2006; Keyes et al., 2002; Lent, 2004). This was supported in a study by Schwartz, Waterman, Umaña-Taylor, Lee, Kim, Vazsonyi, Huynh, Whitbourne, Park, Hudson, Zamboanga, Bersamin, and Williams (2013). In their study of acculturation and well-being among college students from immigrant families, Schwartz et al. (2013) found a positive relationship between PWB and individualistic beliefs. Ryff (1995) further reports that self-oriented dimensions of the PWB model, such as autonomy and self-acceptance are rooted in the Western, individualistic perspectives, whereas others-oriented dimensions of the model, such as positive relations with others are rooted in Eastern, interdependent perspectives. As a result, self-oriented dimensions may be not entirely applicable to racial and ethnic minority individuals from collectivistic cultures unless such persons are fully acculturated to mainstream culture (Iwamoto, 2007; Ryff, 1995). However, this argument was not supported by Baker, Soto, Perez, and Lee (2012). These researchers examined the relationship between acculturation and PWB among three groups of Asian American undergraduate students: Asian-Identified, Western-Identified, and Bicultural-Identified. Although the findings were not significant, the researchers did not find any differences in autonomy and self-acceptance among the three groups of participants. This result is interesting in the light of the high percentage of Asian-Identified participants (58%) in the study.

Despite its limitations, Ryff's PWB model is an appropriate measure of well-being for this current study because of its three key strengths. First, the SPWB is multidimensional and theory-driven measure (Lent, 2004). Next, it is applicable for Asian Americans because the

measure captures within-group differences, such as cultural affinity (Iwamoto, 2007). Finally, Ryff's model emphasizes human development and the existential challenges of life (Keyes et al., 2002), which is congruent with the eudaimonic perspective of well-being. Since college is described as a "time of substantial transition" (Bowman, 2010, p. 180), the SPWB measure was chosen for this study because it takes change into account.

Constantine and Sue (2006) stress the importance of considering the impact of cultural values, beliefs, and practices on dimensions of well-being and conceptualizations of positive mental health. Research has suggested that PWB is higher among racial and ethnic groups that face greater adversity (Ryff et al., 2003). Consistent with this idea, Constantine and Sue (2006) recommend examining how adverse experiences among racially and ethnically diverse individuals may foster psychological well-being.

Although ethnically and culturally diverse, many Asian groups share common cultural values and beliefs (Kim et al., 2001), such as a desire to avoid family shame, collectivism, conformity to familial and social norms and expectations, filial piety, and humility (Kim et al., 1999). To date, there has been no research on first- and continuing-generation South Asian American college students. The following subsection will focus on the Asian cultural views and practices and how such factors may impact students' well-being. Although, studies on Asian Americans may not entirely explain the experiences of South Asian Americans, it is believed that the shared Asian cultural values and beliefs may shed some light on the experiences of first-generation South Asian college students.

Asian Cultural Values

Cultural values influence how individuals understand the etiology of their problems and express psychological distress (Kim & Hong, 2004). Many Asian Americans have been living in

the U.S. for two or fewer generations (Kim, Ng, & Ahn, 2005) and many first-generation college students are children of immigrant parents (Tseng, 2004). According to Kim et al. (2001), recent U.S. immigrants may continue to ascribe to collectivistic worldviews and cultural values. Therefore, it is believed that many first-generation Asian American college students may be less acculturated to mainstream, Western culture and are also more likely to be collectivistic in orientation.

Literature on Asian American psychology has demonstrated the relationship between cultural-specific patterns and mental health outcomes. Kang et al. (2003) explored cultural factors such as affect, emotional expression, relationship quality, and self-esteem to assess well-being (i.e., life satisfaction) among European-American (n=170), Asian American (n=149), Korean (from Korea; n=179), and Chinese (from China; n=141) university students (mean age of 20.33 years) using a multigroup analysis in a structural equation model. Quality of relationships was found to be a significant predictor of both life satisfaction and self-esteem among students from collectivistic cultures. More specifically, the association between interpersonal relationships and life-satisfaction was higher for Korean and Chinese students than for Asian American students. In addition, self-esteem was found to be stronger than interpersonal relationships in predicting life satisfaction for both Asian American and European-American students. Based on their findings, the researchers conclude that relationships with others are more salient for participants who hold collectivistic worldviews. Given that approximately 77% of the Asian American participants in the study were raised only or mainly in the U.S., they may have been highly acculturated to the U.S. American culture. Unlike their peers from China and Korea, Asian American students had similar response patterns as their European-American

peers. This finding is consistent with past studies that found that highly acculturated Asian Americans are more likely to have an individualistic orientation (Kim et al., 2001).

Well-Being of First-Generation College Students

Regardless of their generational status, many college students experience anxiety (Terenzini et al., 1996). However, the transition from high school to college is far more challenging for many FGCS because of their demographic characteristics and first-generation status (McMurray & Sorrells, 2009; Pascarella et al., 2004). Research found that FGCS experience higher levels of stress due to the academic environment, academic performance, household and financial responsibilities, and social and cultural factors (Jenkins et al., 2013; Mehta et al., 2011; Phinney & Haas, 2003). These unique stressors may impact psychological functioning of FGCS.

While studies have focused on mental health concerns and subjective difficulties of FGCS (e.g., Phinney & Haas, 2003), very limited attention has been paid to the PWB of Asian Americans (Kang et al., 2003) and college students (Bowman, 2010), including students who are first in their family to pursue higher education (Wang & Castañeda-Sound, 2008). Furthermore, studies that have examined the effects of generational status on well-being have used aggregated data which often overlooks within- and between-group differences, and fails to explain the unique influences of specific racial and ethnic group membership. The following subsection reviews a few major studies that examined psychological well-being of first-generation college students.

Piorkowski (1983) used the concept, *survivor guil*t, which is defined as "guilt at having survived when others who seem to be equally, if not more, deserving did not" to capture the unique experiences of low-income, urban FGCS (p. 620). In a large metropolitan university

setting, the researcher found that many first-generation students sought counseling services for concerns related to emotional and psychosocial distress, such as family conflicts or chaotic interpersonal relationships. The participants reported internal conflicts because they were left to grapple with the guilt of their success, while their family members struggled. Piorkowski (1983) maintained that in their attempt to become successful, first-generation students received limited support from their friends and family, and were instead confronted with frustration, isolation, and disapproval. This finding is consistent with other studies that described FGCS as often straddling between two cultures: a home culture of less educated family members and friends and an academic culture (Jenkins et al., 2013). Scholars have suggested that because the college milieu differs from the values and behaviors of the subculture in which first-generation students were raised, family and friends often become unsupportive (Brooks-Terry, 1988; Zalaquett, 1999). As a consequence, FGCS struggle to maintain "dual loyalties on a daily basis" (Brooks-Terry, 1988, p. 129). According to Piorkowski (1983), in order to cope with family conflicts and disintegration, these nontraditional students manifest psychic numbing or depressive withdrawal.

Survivor guilt has been found to be related to various psychological issues (e.g., depression), concentration difficulties, problems with study skills, and low levels of academic functioning (Piorkowski, 1983). Piorkowski (1983) suggested that in order for urban FGCS survivors to thrive academically, they must learn to develop more adaptive and less embroiled strategies for coping with family conflicts while expanding their supportive network of interpersonal relationships. Although Piorkowski's (1983) exploratory paper did not focus on psychological well-being, the researcher highlighted a wide range of psychological concerns that first-generation students face as a result of their generational status.

Phinney and Haas (2003) use a narrative approach to explore the complex, interactive process of coping with stress among 30 first-generation, ethnic minority freshmen (mean age of 18.4 years) at an urban commuter university in southern California. Approximately 27% of the participants identified themselves as Asian Americans. Participants were asked to journal once a week for three consecutive weeks about a stressful situation that impacted their academic work, the approach they took to cope with the event, and the resources (e.g., support) they lacked or needed to cope with the difficult situation. Findings revealed that proactive coping, which is doing something in an attempt to resolve the problem (e.g., working harder), was the most frequent type of coping style, whereas seeking support was rated as the most successful coping strategy. Additionally, high levels of self-efficacy and social support were the two most important variables in successful coping among the subjects (Phinney & Haas, 2003). This finding is consistent with previous research on the role of social support (e.g., Dennis et al., 2005) and self-efficacy (e.g., Ramos-Sánchez & Nichols, 2007) on academic success.

Despite the study's research limitations (e.g., small sample size, high percentage of Latinos and females, self-selection bias) and the lack of focus on participants' positive mental health, Phinney and Haas (2003) highlight the approaches FGCS take to cope with various types of stressors, including academic-related stress. The ability to successfully deal with stressors that impact academic success may reflect students' autonomy, personal growth, and positive social relationships, which are all important features of Ryff's PWB model.

Wang and Casteñeda-Sound (2008) investigated the role of generational status, self-esteem, academic self-efficacy, and perceived social support on psychological well-being among 367 college students (128 FGCS and 239 CGCS) attending a public university on the West Coast. The study had a high percentage of Asian American (33.6% FGCS and 22.2% CGCS)

students than any other racial and ethnic minority group. Although the researchers reported studying "psychological well-being," they essentially focused on subjective well-being (e.g., life-satisfaction), as well as psychological dysfunction. As hypothesized, psychosocial variables (i.e., self-esteem, academic self-efficacy, and perceived social support) were significantly correlated with well-being variables (i.e., life satisfaction, stress, depressive symptoms, and somatic symptoms). Compared to continuing-generation students, first-generation students scored significantly lower on academic self-efficacy and reported significantly more somatic symptoms. Furthermore, self-esteem was found to be the single most important predictor of well-being in FGCS. In other words, FGCS who reported higher self-esteem had greater life satisfaction, lower levels of stress, and fewer psychological symptoms. In addition, perceived support from both family and friends had different effects on different dimensions of well-being for FGCS. To elaborate, while perceived support from family significantly predicted stress levels, perceived support from friends significantly predicted psychological symptoms. The researchers found that regardless of students' generational status, compared to their White counterparts, racial and ethnic minority students scored significantly lower on self-esteem, academic self-efficacy, perceived support from family and friends, and life satisfaction. However, this population reported higher levels of stress (Wang & Casteñeda-Sound, 2008).

While various scholars (e.g., Jenkins et al., 2013; Phinney & Haas, 2003) have found that social support is an important predictor of well-being, Wang and Casteñeda-Sound (2008) argue that different sources of social support have different effects on well-being. Sy et al. (2011) compared the relationship between informational and emotional support and stress levels in 339 first- and continuing-generation female freshmen at a four-year university in southern California. The researchers found that the mean for both types of support were significantly lower in FGCS

than CGCS. In addition, similar to the findings by Wang and Casteñeda-Sound (2008), Sy et al. (2011) also found a significant negative correlation between emotional support from parents and general stress for both groups of students. Although informational support from parents was not significantly correlated with stress for either group, there was a negative trend for FGCS, suggesting that first-generation students who had less informational type support experienced higher levels of stress. Contrary to their hypothesis, Sy et al. (2011) did not find a difference in stress levels between first- and continuing-generation students. One possible explanation for this finding may be that the incoming freshmen were surveyed a month prior to starting their first-year in college. Because the students had not yet experienced the transition to college, their academic stress may not have been strongly evident. In addition, the study had a high percentage of CGCS (63%) relative to FGCS (37%).

Jenkins et al. (2013) examined social support, posttraumatic stress, depressive symptoms, and life satisfaction among 1,647 first- and continuing-generation college students (22.3% FGCS) at a large southwestern university (mean age of 20.2 years). Approximately six percent of the participants were Asians or Asian Americans (5% FGCS, 7% CGCS). Compared to students with college-educated parents, first-generation students reported significantly more symptoms of posttraumatic stress disorder (PTSD) and significantly less life satisfaction. Lower scores in life satisfaction among FGCS may be explained by the quality of social support these students perceived and received. Data showed that social support from family, friends, and significant others were positively related to life satisfaction and negatively related to depressive symptoms. Although FGCS did not report significantly stronger depressive symptoms than CGCS, they received significantly less support from family and friends compared to their peers. In terms of gender, data analyses revealed that first-generation women had higher scores for

depressive symptoms and lower scores on life satisfaction, whereas first-generation men scored better compared to continuing-generation males and females. Although the study by Jenkins et al. (2013) did not focus on psychological well-being, the findings reveal how social support and psychological concerns vary between first- and continuing-generation diverse students.

While researchers have focused on psychosocial distress among FGCS, very little attention has been paid to psychological well-being of first-generation students. However, a few studies have examined PWB among diverse college student population. Given the rise of the immigrant population in the U.S. (Schwartz et al., 2013) and since many first-generation college students are children of immigrant parents (Tseng, 2004), it is especially important to examine and understand how acculturation may influence the psychological functioning of racially and ethnically diverse college students of foreign-born parents. Baker et al. (2012) investigated the relationship between acculturative status and psychological well-being, life satisfaction, and depressed mood among 96 Asian/Asian American students (mean age of 19.57 years) attending a four-year university. Approximately 83% of the sample had at least one immigrant parent. The researchers found that Bicultural-Identified participants or individuals who identify with both their native and host cultures experienced greater overall PWB and lower levels of depressed mood than Asian-Identified (individuals who strongly identify with their culture of origin) or Western-Identified (individuals who strongly identify with their host culture) participants. In addition, compared to Asian-Identified and Western-Identified participants, bicultural participants had higher scores on four of the six subscales of the SPWB: Environmental Mastery, Personal Growth, Positive Relations with Others, and Purpose in Life. Interestingly, the researchers did not find any differences in the Autonomy and the Self-Acceptance subscales among the three groups of students.

The study by Baker et al. (2012) had a number of limitations that must be considered. The small number of participants and the unequal number of students in each group may have reduced the study's statistical power. Furthermore, the researchers employed a bidimensional acculturative measure, Suinn-Lew Asian Self-Identity Acculturation Scale, to categorize participants in the three acculturative groups. According to the researchers, the bidimensional scoring item was included after the development of the scale. Therefore, the measure may not have captured the acculturative status of the students accurately. Finally, one possible explanation for why no differences were found in the SPWB's self-oriented dimensions, autonomy and self-acceptance, may be due to the participants' cultural orientation. The majority of the subjects (56%) were Asians. The Asian cultures are highly collectivistic and values interdependence. As such, this group is less likely to ascribe to self-orientated dimensions.

Schwartz et al. (2013) also examined the relationship between acculturation and well-being. The study sample included 2,754 college students from six ethnic groups (mean age of 20.15 years), of which 33% of the participants identified as East/Southeast Asian and 11% identified as South Asian. The researchers measured three types of well-being: subjective well-being, psychological well-being as measured by SPWB, and eudaimonic well-being. According to Schwartz et al. (2013), Ryff's PWB model focuses on "flourishing-feeling competent, that one is able to meet the demands offered by one's social environment (e.g., school or work), self-determined decision making, satisfying interpersonal relationships, purpose in life, and self-acceptance." In contrast, eudaimonic well-being refers to "self-realization, choosing to engage in challenging activities and continuously seeking opportunities for personal growth" (p. 302). The researchers found a strong positive relationship between individualistic values and both

psychological and eudaimonic well-being across gender, first- and second-generation immigrants, and ethnicity.

Three major study limitations were noted by Schwartz et al. (2013). First, the study used a cross-sectional design, which limits conclusions about the directionality in the relationship between acculturation and well-being. Next, the researchers did not investigate mediating factors that may have impacted the results. Finally, the researchers sampled from 30 colleges and universities which included three private universities, three liberal arts colleges, and no Black colleges or universities (Schwartz et al., 2013). Although the studies by Baker et al. (2012) and Schwartz et al. (2013) did not focus on first- and continuing-generation college students, their findings have significant implications for understanding psychological well-being of racial and ethnic minority college students. Previous research has found that students of color are more likely to identify as first-generation college students.

Perhaps one the earliest study that has focused on positive mental health among FGCS is a study that was conducted by Rodriguez (2003). Using a qualitative methodology, Rodriguez (2003) conducted in-depth interviews of diverse first-generation college graduates (ages ranged from 26 to 74) from poor, undereducated backgrounds, who received little to no support in pursuing their education. The researcher sought to explore factors that helped these nontraditional students to succeed after graduation and become activists. In addition to academic-success-promoting factors (e.g., academic preparedness, social support, and sufficient financial aid), successful FGCS benefited from *special status*, which was defined as "academic-success-promoting influence often granted by uneducated family members" and *positive naming*, which resulted when an individual helped first-generation students "develop their potential" (p. 19). Rodriguez (2003) argue that families, educators, community members, academic

institutions, policymakers, and other stakeholders "can do much by design to influence the metamorphosis of students from poor, undereducated backgrounds into college educated, activist members of the middle class" (p. 22). Rodriguez's (2003) exploratory study is a departure from previous work because of its focus on the strengths of FGCS. Moreover, given the relationship between PWB and greater adversity (Ryff et al., 2003), it is possible that the participants in Rodriguez's (2003) study became activists because they overcame various challenges associated with being first in their family to pursue post-secondary education.

To date, only one study has used Ryff's SPWB to compare psychological well-being of first- and continuing-generation college students. In a longitudinal study, Bowman (2010) investigated the development of PWB in 3,801 first- and continuing-generation freshmen from 19 different educational institutions. The researcher found minimal PWB differences between the two groups of students at the beginning of their freshman year. Data indicated that first-generation status was associated with lower self-acceptance and marginally lower levels of personal growth. However, no differences were found in the remaining four SPWB indexes or the overall PWB score (the researcher combined the six dimensions into an index to represent the overall PWB). However, PWB changed during the course of the academic year for FGCS only. In other words, first-generation students showed a decrease in autonomy, personal growth, positive relations with others, and in their overall PWB. After controlling for various pre-college attributes and college experiences, data analyses further revealed that students who identified themselves as male and Asian/Pacific Islander, and had low high school GPAs had lower gains in PWB compared to students who identified themselves as female, White non-Hispanic, and had high high school GPAs (Bowman, 2010). Bowman (2010) also found that although students of Asian/Pacific Islander background received lower scores on all six dimensions of the SPWB than

White students, the mean values for Asian/Pacific Islander students were above the midpoint of the SPWB scales.

Students' SES has received some attention in the literature. First-generation students are more likely to come from lower SES backgrounds (Bui, 2002; Mehta et al., 2011; Richardson & Skinner, 1992; Terenzini et al., 1996; Tseng, 2004). Bowman (2010) found similar patterns of overall well-being in students from middle- and low-income families at the beginning of the college year. Participants from low-income families were found to have lower levels of autonomy, but greater levels of purpose in life and marginally greater levels of self-acceptance. In contrast, participants from high-income families reported significantly higher levels of psychological well-being. Bowman (2010) concludes that socioeconomic adversity may contribute to weaker well-being among first-year college students. Lastly, the researcher reported that high school grades and degree aspirations are strongly and positively related to students' PWB scores at the beginning of college year.

Given that previous studies have found that FGCS work longer hours, typically off campus (Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004), it is important to examine how first-generation students' employment status may affect their psychological well-being. Bowman (2010) found that working 10 or fewer hours per week was negatively related to the development of psychological well-being compared to not working at all. However, regardless of the work location (i.e., on or off campus), the researcher found that working more than 20 hours per week was positively related to the development of psychological well-being. This result is interesting given previous research findings. Previous studies on college adjustment found that when students work longer hours and off campus, they are less likely to socially integrate into the campus community (Billson & Brooks-Terry, 1982). Working long hours, off

campus may also impact students' mental health. Consistent with past studies (e.g., Pascarella et al., 2004), Bowman (2010) also found that participation in co-curricular activities is positively associated with personal growth, positive relations with others, and purpose in life.

Although Bowman's (2010) study was longitudinal, the researcher only followed students during their first year of college. This may limit the generalizability of the findings. In addition, the study recruited participants from various institutions (e.g., community colleges), which may explain some of the unexpected findings (e.g., relationship between employment status and levels of PWB).

Despite the study's limitations, Bowman's (2010) study has a number of strengths. The study includes a large sample size and students of diverse backgrounds. Furthermore, it is one of the few studies that used Ryff's SPWB to measure psychological well-being among college-aged students. Finally, Bowman's (2010) study offers valuable data on how demographic variables (e.g., race and ethnicity), pre-college characteristics (e.g., high school GPA), non-cognitive variables (e.g., academic aspirations), and family income impact well-being of first- and continuing-generation college students. As a result, Bowman's (2010) study provides a valuable framework for the current study.

Summary

Research evidence shows differences in mental health between FGCS and CGCS. Differences in well-being between the two groups of students may be explained by students' demographic characteristics, social capital, and college-going experiences. With the rise of the Asian immigrants in the U.S. (Hoeffel et al., 2010), it is anticipated that there will be an increase in the number of first-generation Asian students within the American post-secondary education.

Therefore, it is important to explore psychological well-being of Asian American students who are first in their family to obtain a college education.

Carol D. Ryff's psychological well-being model aligns with the eudaimonic perspective of well-being. The PWB model examines growth, purpose, and self-actualization, in addition to an individual's functioning across different contexts and stages of development (Lent, 2004; Ryff, 1989). Since PWB has been shown to be higher among minority groups who face greater adversity (Ryff et al., 2003), it is possible that FGCS may experience higher levels of positive mental health due to the unique challenges they encounter when they enter college. Ryff's PWB model is valuable because it considers within-group differences such as cultural affinity (e.g., Asian collectivistic values) and emphasizes human development and existential challenges of life (Keyes et al., 2002).

Literature suggests a relationship between cultural orientation and psychological functioning. Schwartz et al. (2013), for example, found a strong positive relationship between individualistic values and psychological well-being. Baker et al. (2012) found that students who identify as bicultural experience greater overall PWB and lower levels of depressed mood than Asian students who strongly identify with their culture of origin or Western students who strongly identify with their host culture.

Bowman (2010) found small PWB differences between first- and continuing-generation students at the beginning of the college year. However, the overall PWB scores declined for FGCS during the course of their freshmen year. Poor pre-college experiences and familial and financial obligations may play a critical role in students' mental health. While studies also indicate the buffering effect of social support on stress levels and its positive impact on well-being (Jenkins et al., 2013; Phinney & Haas, 2003; Wang & Casteñeda-Sound, 2008), cultural

dissonance may prevent first-generation racial and ethnic minority college students from receiving adequate support from their family members (Piorkowski, 1983)

CHAPTER III

METHODOLOGY

This chapter focuses on research methodology. It begins by describing the participants, followed by a description of the three measurements that were used for the study. Finally, the chapter concludes with a discussion of the study's procedure.

Participants

The research participants were first- and continuing-generation South Asian American undergraduates enrolled in two four-year post-secondary institutions. *First-generation college students* (FGCS) were defined as students for whom neither parent has attended college/university nor earned a college degree either inside or outside the United States (U.S). In contrast, *continuing-generation college students* (CGCS) were defined as students who have at least one parent who has attended college/university or earned a college degree either inside or outside the U.S. Since previous studies have found that first-generation students are more likely to attend two-year public institution (Choy, 2001; Pascarella et al., 2004), this research was particularly interested in FGCS attending four-year public institutions. Since four-year colleges/universities take longer time to complete and are more demanding than two-year institutions, it may offer valuable information about college adjustment and psychological well-being among first-and continuing-generation college students.

Participants were recruited through general undergraduate courses and various student organizations from the University of Iowa (UI) in Iowa City, IA and Wayne State University (WSU) in Detroit, MI. Both UI and WSU are predominantly White institutions and are comprised of 3.4% and 7.3% Asian American undergraduates, respectively. Although the number of Asian American students enrolled at UI and WSU are vastly different, it was believed

that including more than one university may provide rich data to the study. To be eligible to participate in the study, participants had to meet the following inclusion criteria:

1) Have parents who were born in South Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, or Sri Lanka)
2) Self-identify as South Asians living in the U.S.
3) Between 18 and 22 years of age
4) Enrolled in 9 or more credit hours as an undergraduate at either UI or WSU

Using a statistical power calculator for Hierarchical Multiple Regression, it was determined that with a power of .8, a necessary sample size of 58 will be needed to detect an effect size of .15.

Instruments

Demographic Questionnaire

A demographic questionnaire was used to identify participants' generational status in terms of college (i.e., FGCS or CGCS). The questionnaire was designed to obtain the following data about the participant: the university in which the participant was enrolled at the time of the survey; age; gender; ethnicity, parents' ethnicity; if identify as a FGCS, does the participant have (an) older sibling(s) or (a) close relative(s) with college experience/degree; parents' educational level; generational status in terms of immigration; place of birth; if not born in the U.S., the number of year(s) resided in the U.S.; if not born in the U.S., plans about leaving the U.S to the country of origin after completing undergraduate degree; marital status; high school cumulative grade point average (GPA); current college grade level; number of credit hours taking; college GPA; living situation; employment status, setting, and hours; number of hours spent weekly in co-curricular activities; and current household income (see Appendix B).

Student Adaptation to College Questionnaire

Originally a 52-item measure, the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1989, 1999) is a 67-item, self-report questionnaire developed to assess the quality of students' adjustment to college. The instrument includes scores for the full scale and four major subscales: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Goal Commitment/Institutional Adjustment (also referred to as Attachment). Each SACQ item is a statement to which a participant responds along a nine-point scale ranging from 1 (applies very closely to me) to 9 (doesn't apply to me at all). A higher score denotes better self-reported adjustment to college. Thirty four of the items are negatively keyed (values running from one to nine), whereas the remaining 33 items are positively keyed (values running from nine to one). The questionnaire takes approximately 20 minutes to complete (Baker & Siryk, 1989, 1999).

The SACQ is designed for use in counseling and research. Although the first version of the questionnaire was intended for use with college freshmen, the items were later modified to make it appropriate for students of all college levels (Baker & Siryk, 1989, 1999).

The SACQ is scored by converting the raw scores into T-scores (mean of 50, standard deviation of 10) and percentile rank equivalents. The normative sample for the 67-item version of the SACQ was based on 1,424 freshmen at Clark University who were tested during both semesters of academic years 1980-1981, 1981-1982, 1982-1983, and 1983-1984 combined. The manual presents a brief discussion on previous studies that showed significant sex and semester differences on several of the SACQ subscales. As a result, separate norms were calculated for male and female students in the first and second semesters (second semester did not include first semester or first- or second-quarter of freshman year; Baker & Siryk, 1999).

The original 52-item version of the SACQ had large intercorrelations ranging from .73 to .87 among and between the subscales and the full scale. The size of the intercorrelations suggested that the subscales measure a common construct, but "small enough to support the conceptualization of that construct as having different facets as represented by the subscales" (Baker & Siryk, 1999, p. 34). The 67-item version was administered across 34 different samples at 21 different colleges and universities (Baker & Siryk, 1989, 1999).

The manual (Baker & Siryk, 1989, 1999) provides a summary of correlations from a number of studies that have examined the relationship between SACQ and personality variables and the relationship between SACQ and environment-related experiences.

The score for the SACQ full scale was reported to be higher for students who identified themselves as "internals" on the Internal-External Locus of Control Scale (Rotter, 1966) than students who identified as "externals" (Martin, 1988). Moreover, there was a significant negative correlation between a measure of academic locus of control (Trice, 1985) and all SACQ indexes (Ogden & Trice, 1986). The Academic Adjustment (-.57) and Personal-Emotional Adjustment (-.53) subscales had the highest correlations, indicating that the greater the sense of personal control over academic outcomes, the better the adjustment to college. The social self-efficacy index from the Self-Efficacy Scale (Sherer et al., 1982) was significantly correlated (.58) with the Social Adjustment subscale of the SACQ (Saracoglu, 1987).

In addition, the Academic Adjustment, Social Adjustment, and Personal-Emotional Adjustment subscales were significantly positively correlated with the Self-Esteem Inventory (Bachman & O'Malley, 1977), with the Personal-Emotional Adjustment subscale showing a correlation of .40 to .54 (Saracoglu, 1987). Caro (1995) found that loneliness, as measured by the Revised UCLA Scale (Russell, Peplau, & Cutrona, 1980) and social anxiety, as measured by

the Social Avoidance and Distress Scale (Watson & Friend, 1969) were negatively correlated with all four SACQ subscales, with the Social Adjustment subscale having the highest correlation (-.66 with the Revised UCLA Loneliness Scale and -.52 with social anxiety on the Social Avoidance and Distress Scale).

In studies examining the relationship between measures of mental health characteristics and the SACQ, a significant positive relationship was found between the full scale score of the Mental Health Inventory (Veit & Ware, 1983) and all SACQ indexes, in which the Personal-Emotional Adjustment subscale was found to have the highest significant correlation (.80; Flescher, 1986). In addition, all SACQ subscales were significantly correlated in the expected negative direction with depression, as measured by the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), with the highest correlation showing for Personal-Emotional Adjustment subscale (-.46 to -.75; Adan & Felner, 1987).

An environment-related experience variable that has been examined in a number of studies is the occurrence of life stressors from a person's past. Three aspects of events (negative impact rating, positive impact rating, and total number of life events), as measured by the Life Events Checklist (Johnson, 1982) showed correlation in the expected directions, and were found to be consistently significant for the full scale score of the SACQ (Adan & Felner, 1987). Flescher (1986) using the Life Experiences Survey (Sarason, Johnson, & Siegel, 1978), Hogan (1986) using the Psychological Distress Inventory (Lustman, Sowa, & O'Hara, 1984), and Adan and Felner (1987) using the Adolescent Hassles Scales (Farber & Felner, 1980) reported markedly similar findings.

The Academic Adjustment subscale consists of 24 items with internal consistency reliability coefficients (alpha values) ranging from .81 to .90. The subscale measures students'

ability to cope with various educational demands of college and has four clusters: (a) Motivation, which assesses attitudes toward academic goals and academic work (6 items); (b) Application, which evaluates the degree to which the students are applying themselves to their academic work (4 items); (c) Performance, which focuses on the efficacy or adequacy of students' academic efforts (9 items); and (d) Academic Environment, which examines satisfaction with the academic environment and what it has to offer (5 items). A sample positive item of this subscale is "I have been keeping up to date on my academic work." A sample negative item is "I am finding academic work at college difficult" (Baker & Siryk, 1989, 1999).

The Social Adjustment subscale includes 20 items with internal consistency reliability coefficients ranging from .83 to .91. This subscale assesses students' success in coping with the interpersonal-societal demands of college. This subscale consists of four clusters: (a) General, which measures the extent and success of social activities and functioning (7 items); (b) Other People, which measures involvement and interpersonal relationships with others on campus (7 items); (c) Nostalgia, which measures social relocation, feeling lonely, and homesickness (3 items); and (d) Social Environment, which measures social satisfaction with the college environment (3 items). A sample positive item of this subscale is "I feel that I fit in well as part of the college environment." A sample negative item is "I feel I am very different from other students at college in ways that I don't like" (Baker & Siryk, 1989, 1999).

The Personal-Emotional Adjustment subscale has 15 items with internal consistency reliability coefficients ranging from .77 to .86. The subscale is designed to measure students' intrapsychic state related to their adjustment to college. The subscale consists of two clusters: (a) Psychological or sense of psychological functioning (9 items); and (b) Physical or sense of physical functioning (6 items). A sample positive item of this index is "I have been feeling in

good health lately." A sample negative item is "I am experiencing a lot of difficulty coping with the stresses imposed upon me in college" (Baker & Siryk, 1989, 1999).

The Attachment subscale includes 15 items with internal consistency reliability coefficients ranging from .85 to .91. The subscale examines students' satisfaction with the college experience and the college they are attending. This subscale includes to clusters: (a) General, which measures thoughts and feelings about college in general (3 items); and (b) This College, which assesses feelings and attitudes about the institution the student is currently attending (4 items). The eight items that are excluded from the subscale are shared with the Academic Adjustment and the Social Adjustment subscales. A sample positive item of the Attachment subscale is "I expect to stay at college for a bachelor's degree." A sample negative item is "Lately I have been giving a lot of thought to dropping out of college altogether and for good" (Baker & Siryk, 1989, 1999).

The full scale score is an index of overall adjustment, and includes the sum of scores for all 67 items. The internal consistency reliability coefficients (alpha values) of the overall SACQ scale range from .92 to .95 (Baker & Siryk, 1989, 1999).

Scales of Psychological Well-Being

The Scales of Psychological Well-Being (SPWB; Ryff, 1989) is a self-report inventory that measures varying aspects of an individual's psychological well-being (PWB). Several shortened versions of the SPWB have been developed from the original 120-item parent scale (see Ryff, 1989). This measure consists of six dimensions of PWB: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance.

The present study will employ the shortened 84-item (14 items per scale) version for ease of administration. Participants rate each item on a six-point Likert-type scale ranging from 1

(strongly disagree) to 6 (strongly agree). The total score for each subscale can range from 14 to 84. Items on each scale are positively or negatively scored. Higher scores represent self-determinedness and independence (autonomy); a sense of mastery and competence in managing the environment (environmental mastery); feeling of continued development (personal growth); warm, satisfying, trusting relationships with others (positive relations with others); goals in life and a sense of directedness (purpose in life); and positive attitude toward the self (self-acceptance). Lower scores suggest lower levels of PWB (Ryff, 1989).

In the initial SPWB construction process, items were generated to correspond with the theoretical definitions of well-being, and also to apply to adults of all ages and both sexes. Items that were developed underwent preliminary evaluations based on the following criteria: "ambiguity or redundancy of the items, lack of fit of the items with their scale definitions, lack of distinctness of items with items from other scales, inability of items to produce variable responses, and whether all aspects of the scale definitions were covered by the items" (p. 1072). Following the item construction procedure, items were reduced to 120 items (20 items per scale), which were divided equally into positive and negative items.

The original SPWB 120-item parent scale was administered over a six-week period to 117 participants and produced test-retest reliability coefficients ranging from .81 to .88. Preliminary evidence for the validity of the SPWB was obtained by comparing the newly constructed measure with six prior measures of well-being: (1) The Life Satisfaction Index (Neugarten, Havighurst, & Tobin, 1961); (2) Affect Balance Scale (Bradburn, 1969); (3) Self-Esteem Scale (Rosenberg, 1965); (4) Powerful Others, Internal, Chance (Levenson, 1974); (5) Self-Rating Depression Scale (Zung, 1965); and (6) The Revised Philadelphia Geriatric Center Morale Scale (Lawton, 1975). Results indicated significant positive correlations between the

SPWB and prior measures of positive functioning (i.e., life satisfaction, affect balance, self-esteem, internal control, and morale), with coefficients ranging from .25 to .73 and significant negative correlations between the SPWB and prior measures of negative functioning (i.e., chance control, depression, powerful others), with coefficients ranging from -.30 to -.60.

Although scales' intercorrelations were highly associated, ranging from .32 to .76, various sources of evidence support the theory-driven dimensions as representing distinct aspects of positive PWB. For example, multivariate and mean-level analyses indicated that these correlated indexes load on different factors of well-being and show differential age profiles. Ryff (1989) also performed a factorial analysis, which demonstrated that separate aspects of well-being emerge from the combination of prior indexes of well-being. The analysis provided additional evidence that well-being is best conceptualized through a combination of previous indexes, in addition to the newly theoretically derived dimensions.

In the early validation study, Ryff (1989) also reported differences in age and gender in relation to PWB. Incremental age profiles (from young adulthood to midlife) were found for autonomy and environmental mastery and decremental age profiles (from midlife to old age) were found for personal growth and purpose in life. No age differences were found for positive relations with others and self-acceptance. In terms of gender differentials, men reported higher levels of internal control and morale, and lower levels of depression. In contrast, women reported lower levels of internal control and morale, and higher levels of depression.

The Autonomy subscale is intended to measure an individual's sense of self-determination, wherein the individual is either guided by an internal locus of control or the desire to please others. A sample positive item is "I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people." A sample negative item is "Sometimes I

change the way I act or think to be more like those around me." This subscale has an internal consistency (coefficient alpha) of .83 and a correlation of .97 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

The Environmental Mastery subscale is a measure of the ability to manage life and the surrounding context to fit one's needs. A sample positive item is "In general, I feel I am in charge of the situation in which I live." A sample negative item is "The demands of everyday life often get me down." The index has an internal consistency of .86 and a correlation of .98 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

The Personal Growth subscale is intended to measure an individual's sense of continued growth and development as a person. A sample positive item is "In general, I feel that I continue to learn more about myself as time goes by." A sample negative item is "I am not interested in activities that will expand my horizons." The subscale has an internal consistency of .85 and a correlation of .97 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

The Positive Relations with Others subscale is a measure of the ability to have warm, satisfying, trusting, and reciprocal interpersonal relationships with others in one's life. A sample positive item is "Most people see me as loving and affectionate." A sample negative item is "Maintaining close relationships has been difficult and frustrating for me." The index has an internal consistency (coefficient alpha) of .88 and a correlation of .98 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

The Purpose in Life subscale is intended to measure an individual's beliefs about life as purposeful and meaningful. A sample positive item is "I feel good when I think of what I've

done in the past and what I hope to do in the future." A sample negative item is "I live life one day at a time and don't really think about the future." The subscale has an internal consistency (coefficient alpha) of .88 and a correlation of .98 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

Finally, the Self-Acceptance subscale is a measure of the ability to accept one's self and past, and to hold positive attitudes about these aspects. A sample positive item is "When I look at the story of my life, I am pleased with how things have turned out." A sample negative item is "I feel like many of the people I know have gotten more out of life than I have." The index has an internal consistency (coefficient alpha) of .91 and a correlation of .99 with the 120-item parent scale (Ryff, 1989; C.D. Ryff, personal communication, January 19, 2013).

Procedure

During the 2013-2014 academic year, participants at varying points in their four-year education in UI and WSU were invited to participate in the study. Data were collected after the first half of fall semester (late October 2013) to ensure that incoming freshmen had sufficient time to adjust to their college environment.

Subject recruitment and data collection were conducted using several methods. First, the primary investigator reviewed the university website in order to identify general undergraduate courses from which to recruit participants. The course instructors were contacted and asked to forward the recruitment email, which included the survey link, to their undergraduate students. Additionally, student members of various campus organizations (e.g., Bangladeshi Student Association) were contacted via email about the study. Furthermore, participants learned about the study from research flyers that were posted throughout the university campus. Finally,

eligible participants learned about the study by word of mouth from other individuals (e.g., peers, participants, friends, and family).

The only survey was administered electronically via Qualtrics (Qualtrics, Inc.) in English. It contained an Introduction page, the Informed Consent document, the three measures (Demographic Questionnaire, SACQ, and SPWB), a Debriefing page, and finally, a Thank You page. The Introduction page included a brief description about the study and four screening questions (i.e., eligibility requirements) to screen subjects who may not qualify for the study. If subjects answered "no" to any one of the four screening questions, they were directed to a new page that informed them that they did not qualify for the study and requested them to close the web browser. If participants answered "yes" to all of the four questions, they were directed to the Informed Consent document. This document included information regarding the purpose of the research, inclusion criteria, the number of participants that would take part in the study, information about the measures, the length of the online survey, extent and limits of confidentiality, risks and benefits of the study, compensation, voluntary rights, and contact information in the event of concerns or questions. The participants were required to read the Informed Consent document and give consent by clicking a button that stated, "I affirm that I understand the purpose and nature of this research study and I agree to participate in this study. I understand that I am free to withdraw at any time without any penalty." Once they click the button, participants were directed to the study's Demographic Questionnaire, followed by the SACQ (Baker & Siryk, 1989, 1999) and the SPWB (Ryff, 1989).

After completing the three measures, the participants were directed to the Debriefing page. This page contained information on how to contact the primary investigator for questions, concerns, and study results. Although no identifying information was collected, on the final

page (i.e., Thank You page), the participants had the option to click a link to enter a drawing to win one of twenty-five $5.00 gift cards to Subway or one of three $25 gift cards to Target. Participants who chose to enter the drawing provided their email addresses on a separate, secure page; email addresses of these participants were not linked to their survey responses.

CHAPTER IV

RESULTS

This chapter presents the research results. First, the characteristics of the study participants are reported. Next, descriptive statistics are presented for the two measures, the Student Adaptation to College Questionnaire (SACQ) and the Scales of Psychological Well-Being (SPWB), including previously published data and statistics on reliability. Finally, the research questions are addressed. A significance level of $\alpha = .05$ was used for all analyses.

Sample Characteristics

A total of 100 students met the inclusionary criteria and completed the online survey, which was distributed through Qualtrics. The participants' responses were examined for inconsistent and missing data. Ten subjects misidentified their generational status based on their report of their parents' educational level. As such, these participants were re-categorized as either first-generation college students (FGCS) or continuing-generation college students (CGCS). As recommended in the SACQ manual (Baker & Siryk, 1999), missing responses were prorated by substituting the mean of the responses for the full scale and/or the subscale on which the missing item(s) appeared. Subjects who omitted six or more items (43% or more) on any given 14-item per scale of the SPWB were eliminated from subsequent analyses for that subscale. One participant did not provide any responses, whereas six participants started the questionnaire, but did not answer a majority of the items in the psychological well-being measure, SPWB. Therefore, seven subjects were excluded from the SPWB analyses. In summary, 100

survey responses for the SACQ and 93 survey responses for the SPWB were used to analyze the data.

Table 1 presents a summary of the demographic characteristics of the study sample. Of the 100 subjects who participated in the study, the majority were CGCS (75%), female (74%), living off-campus (72%), and employed (64%). Ninety-percent of the students were enrolled in Wayne State University (WSU). The mean and the standard deviation for age were 19.83 and 1.40, respectively.

College Year was evenly distributed throughout the sample (all years were 21-23%, whereas 10% of the respondents were 5th year or beyond). The majority of the subjects reported a high school GPA within the range of A+ to A- (63%) and a college GPA within the range of B+ to B- (55.3%). Additionally, the highest percentage of subjects (37%) spent one to five hours participating in extracurricular activities offered on and around campus.

Of the 64% of the participants who were employed during the time of the study, the majority worked 11-20 hours (53.1%) and off-campus (64.1%). Lastly, the two highest ranges reported for household income were $20,000-$29,999 (20%) and $100,000 or more (23%). Most of the participants in the study reported household income of less than $29,999 (38%).

Of the 100 participants included in the analyses, 25% were FGCS and 75% were CGCS. In addition, this study included high percentages of females (74%) of which 72% were FGCS and 74.7% were CGCS.

Although the study recruited participants from various South Asian ethnic groups, most of the participants in the study identified as either Bangladeshi (42%) or Indian

(40%). Moreover, the ethnic heterogeneity within the two groups of students was evident. First-generation students identified as either Bangladeshi or Pakistani. The majority of the FGCS sample was Bangladeshi (80%), whereas the majority of the CGCS sample was Indian (53.3%). Table 2 presents a summary of students' ethnicity by generational status.

Pearson's chi-square tests were conducted to compare high school grade point average (GPA) college GPA, housing type, employment status, number of hours worked per week, employment location, number of hours participated weekly in co-curricular activities, and household income between first- and continuing-generation college students.

No significant differences were found for high school (χ^2 (1, N = 100) = .014, p = .905) and college (χ^2 (1, N = 85) = 2.871, p = .090) GPA between first- and continuing-generation students. However, a significant difference was found between the two groups in terms of where they lived (χ^2 (1, N = 100) = 9.524, p = .002). First-generation students (96%) were more likely to live off-campus than students from college-educated families (64%). Of the FGCS who were living off-campus, 88% were living at home with their parents.

No significant differences were found for employment status [1 = employed; 2 = unemployed] (χ^2 (1, N = 100) = .926, p = .336) and number of hours worked per week [1 = 1-20 hours; 2 = 21-40 hours] (χ^2 (1, N = 64) = 2.576, p = .108) between first- and continuing-generation students. However, a significance difference was found for employment location (χ^2 (1, N = 64) = 4.040, p = .044). First-generation students (83.3%) were more likely to work off campus compared to continuing-generation

students (56.5%). In addition, a significant difference was found for household income between the two groups of students [1 = 0-29,999; 2 = 30,000-69,999; 3 = 70,000-99,999; 4 = over 100,000] (χ^2 (3, N = 100) = 24.995, p = .000). The household income was significantly higher for CGCS than FGCS. First-generation participants were less likely to have a household income of over $100,000 and were more likely to have a household income less than $29,999 than their continuing-generation counterparts.

First-generation students spent significantly less hours per week [1 = 0-5; 2 = 6-10; 3 = 11 or more] (χ^2 (2, N = 100) = 6.750, p = .034) participating in co-curricular activities compared to their continuing-generation peers. Finally, one participant from each group reported that they were planning to leave to their country of origin after completing their college degree.

Table 1: *Demographic Characteristics of the Study Sample*

Variable	FGCS n (%)	CGCS n (%)	Total n (%)
Sample Size	25 (25.0%)	75 (75.0%)	100 (100%)
Age			19.83* 1.40*
Gender			
Male	7 (28.0%)	19 (25.3%)	26 (26%)
Female	18 (72.0%)	56 (74.7%)	74 (74%)
High School GPA			
A+ to A-	16 (64.0%)	47 (62.7)	63 (63%)
B+ to B-	9 (36.0%)	28 (37.3)	37 (37%)
College Year			
1st Year	6 (24%)	17 (22.7%)	23 (23%)
2nd Year	6 (24%)	17 (22.7%)	23 (23%)
3rd Year	4 (16%)	17 (22.7%)	21 (21%)
4th Year	3 (12%)	20 (26.7%)	23 (23%)
5th Year	6 (24%)	3 (4%)	9 (9%)
Beyond 5th Year		1 (1.3%)	1 (1%)
College GPA			

A+ to A-	4 (21.1%)	28 (42.4%)	32 (37.6%)
B+ to B-	12 (63.2%)	35 (53.0%)	47 (55.3%)
C+ to C-	3 (15.8%)	3 (4.5%)	6 (7.1%)
Housing Type			
Living On-Campus	1 (4.0%)	27 (36.0%)	28 (28%)
Living Off-Campus	24 (96.0%)	48 (64.0%)	72 (72%)
Employment Status			
Yes	18 (72.0%)	46 (61.3%)	64 (64%)
No	7 (28.0%)	29 (38.7%)	36 (36%)
Employment Location			
Working On-Campus	3 (16.7%)	20 (43.5%)	23 (35.9%)
Working Off-Campus	15 (83.3%)	26 (56.5%)	41 (64.1%)
Employment Hours per Week			
1-10 hours	2 (11.1%)	12 (26.1%)	14 (21.9%)
11-20 hours	9 (50.0%)	25 (54.3%)	34 (53.1%)
21-30 hours	4 (22.2%)	7 (15.2%)	11 (17.2%)
31-40 hours	3(16.7%)	2 (4.3%)	5 (7.8%)
Co-Curricular Activities per Week			
0 hours	10 (40.0%)	7 (9.3%)	17 (17%)
1-5 hours	9 (36.0%)	28 (37.3%)	37 (37%)
6-10 hours	4 (16.0%)	21 (28.0)	25 (25%)
11-15 hours	2 (8.0%)	11 (14.7%)	13 (13%)
16-20 hours		4 (5.3%)	4 (4%)
21-25 hours		2 (2.7%)	2 (2%)
26-30 hours	0 (0%)	0 (0%)	0 (0%)
30 hours or more		2 (2.7%)	2 (2%)
Household Income			
No income	1 (4.0%)	2 (2.7%)	3 (3%)
$0-9,999	3 (12.0%)	4 (5.3%)	7 (7%)
$10,000-19,999	4 (16.0%)	4 (5.3%)	8 (8%)
$20,000-29,999	11 (44.0%)	9 (12.0%)	20 (20%)
$30,000-39,999	3 (12.0%)	3 (4.0%)	6 (6%)
$40,000-49,999	2 (8.0%)	2 (2.7%)	4 (4%)
$50,000-59,999		4 (5.3%)	4 (4%)
$60,000-69,999		4 (5.3%)	4 (4%)
$70,000-79,999	1 (4.0)	9 (12.0%)	10 (10%)
$80,000-89,999		5 (6.7%)	5 (5%)
$90,000-99,999		6 (8.0%)	6 (6%)
$100,000 or more		23 (30.7%)	23 (23%)

Note. *These values are mean and standard deviation, respectively.

Table 2*: Participants by Ethnicity and Generational Status*

Ethnicity	FGCS n (%)	CGCS n (%)	Total n (%)
Bangladeshi	20 (80%)	22 (29.3%)	42 (42%)
Indian		40 (53.3%)	40 (40%)
Nepalese		1 (1.3%)	1 (1%)
Pakistani	5 (20%)	11 (14.7%)	16 (16%)
Other		1 (1.3%)	1 (1%)
Total	**25**	**75**	

Descriptive Statistics

Table 3 presents a summary of the means, standard deviations, ranges, and Cronbach's alphas for the two measures, SACQ and SPWB. In the present study, the internal consistency reliability for the SACQ subscales ranged from .89 to .95. All the Cronbach's alpha values for the SACQ were similar to those reported in the manual (.77 to .95; Baker & Siryk, 1999).

For the SPWB, the internal consistency reliability ranged from .83 to .91. In the original validity study, Ryff (C.D. Ryff, personal communication, January 19, 2013) reported alpha values of .83 for autonomy, .86 for environmental mastery, .85 for personal growth, .88 for positive relations with others, .88 for purpose in life, and .91 for self-acceptance. The current study found comparable alpha values for all six subscales: .86 for autonomy, .89 for environmental mastery, .83 for personal growth, .86 for positive relations with others, .86 for purpose in life, and .91 for self-acceptance.

Table 3: *Descriptive Data of Psychometric Instruments for the Study Sample*

Measure	N	Mean	SD	Range	Alpha
SACQ					
Full Scale	100	48.21	10.67	27-74	.95
Academic adjustment	100	49.58	10.06	25-74	.89
Social Adjustment	100	50.08	10.65	25-75	.87
Personal-Emotional Adjustment	100	44.58	11.36	25-75	.89
Attachment	100	50.25	9.50	27-75	.85
SPWB					
Autonomy	93	4.17	.829	1.57-5.79	.86
Environmental Mastery	93	4.09	.886	1.71-5.86	.89
Personal Growth	93	4.87	.663	2.93-5.93	.83
Positive Relations with Others	93	4.74	.808	2.79-6.00	.86
Purpose in Life	93	4.55	.841	2.21-5.93	.86
Self-Acceptance	93	4.21	.996	1.21-5.86	.91

N= Sample Size

Table 4 shows the means and standard deviations, and compares data from the present study to other studies that have used the SACQ and SPWB. Furthermore, a series of one-sample *t*-tests were conducted to examine the differences in means between the study sample and the published data. The comparison data for the SACQ came from Hertel (2002). This researcher investigated similarities and differences between 130 first- and continuing-generation students during their first year in college. The study sample included predominately White students and a small minority sample (e.g., Asian American students comprised of 4% of FGCS and 5% of CGCS). Compared to the findings by Hertel (2002), the overall adjustment to college among students in the current study was significantly lower (full scale; $t(99) = -4.113$, $p < .001$). In addition, participants were significantly less likely to successfully cope with the various

educational demands of college (academic adjustment; $t(99) = -4.423$, $p < .001$), experienced significantly more physical and psychological distress (personal-emotional adjustment; $t(99) = -3.687$, $p < .001$), and had a significantly lower sense of satisfaction about being in college in general and the college they were currently attending (attachment; $t(99) = -2.669$, $p = .009$).

The comparison data for the SPWB responses were obtained from a study conducted by Bowman (2010). Bowman (2010) investigated changes in psychological well-being among 3,081 first- and non-first-generation college students during their freshman year in college. The participants in the current study reported significantly lower mastery and competence in managing their environment (environmental mastery; $t(92) = -2.712$, $p = .008$) and were significantly less likely to hold positive attitudes about various aspects of themselves (self-acceptance; $t(92) = -3.310$, $p = .001$). However, participants in this study were significantly more likely to perceive themselves as developing and expanding (personal growth; $t(92) = 3.796$, $p < .001$). It is important to note that the participants in Bowman's (2010) study were predominately White non-Hispanics (81.5%), with a small percentage of Asian/Pacific Islanders (7.4%).

Table 4: *Scores and Published Comparisons for Measures*

Measures	k	Sample			Published Studies		
		N	Mean	SD	N	Mean	SD
SACQ	67						
Full Scale*	67	100	413.97	73.08	130	444.03[1]	65.25
Academic Adjustment*	24	100	144.67	27.04	130	156.63[1]	27.82
Social Adjustment	20	100	130.32	25.57	130	133.12[1]	24.28
Personal-Emotional Adjustment*	15	100	81.53	23.11	130	90.05[1]	20.78
Attachment*	15	100	103.86	19.30	130	109.01[1]	17.77

SPWB	84						
Autonomy	14	93	4.17	0.829	3,081	4.32[2]	0.727
Environmental Mastery*	14	93	4.09	0.886	3,081	4.34[2]	0.728
Personal Growth*	14	93	4.87	0.663	3,081	4.61[2]	0.698
Positive Relations with Others	14	93	4.74	0.808	3,081	4.65[2]	0.764
Purpose in Life	14	93	4.55	0.841	3,081	4.61[2]	0.746
Self-Acceptance*	14	93	4.21	0.996	3,081	4.55[2]	0.801

Note. The sample means for the SACQ were calculated using the adjusted score for the Full Scale and the four subscales

*The mean in the current study was significantly different from the comparison study using $\alpha = .05$

n= Number of items in a scale

N= Sample size

[1]= Norms and standard deviations based on first- and non-first generation students in their first-year in college (N=130; Hertel, 2002)

[2]= Norms and standard deviations based on first- and non-first generation freshmen at the end of their first year in college (N=3,081; Bowman, 2010)

Research Questions

The first research question asked whether first-generation South Asian American college students are different from continuing-generation South Asian American college students on the four subscales of college adjustment, namely, academic adjustment, social adjustment, personal-emotional adjustment, and attachment, as measured by the SACQ (see Table 5). A Multivariate Analysis of Variance (MANOVA) was conducted with the four subscales of the SACQ as the dependent variables. The overall F-test for the MANOVA was significant indicating that there are differences between the two groups of students ($F(4,95) = 2.897$, $p = .026$). Separate ANOVAs were conducted to further examine the differences between the two groups. While CGCS scored higher than FGCS on all subscales, in the univariate ANOVAs, the difference was significant only for the Social Adjustment subscale. Therefore, the data in the current study suggest that first-

generation students were significantly less likely to succeed in coping with the interpersonal-societal demands inherent in college than continuing-generation students.

The second research question asked whether first-generation South Asian American college students are different from continuing-generation South Asian American college students on the six subscales of psychological well-being, namely, autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance, as measured by the SPWB. A MANOVA was conducted using the six subscales of the SPWB as the dependent variables. The two groups of students were not significantly different on the six subscales of SPWB ($F(6,86) = .997, p > .05$). Table 5 presents the means for first- and continuing-generation college students on each of the four subscales of SACQ (using T-scores) and six subscales of SPWB.

Table 5: *Mean Differences between FGCS and CGCS*

	FGCS			CGCS			Effect Size**
Measures	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**	
SACQ		**46.32**	**10.22**				
Academic Adjustment	25	46.32	10.22	75	50.67	9.84	0.035
Social Adjustment*	25	46.24	9.13	75	51.36	10.86	0.044
Personal-Emotional Adjustment	25	42.88	10.96	75	45.15	11.51	0.008
Attachment	25	49.04	8.92	75	50.65	9.71	0.005
SPWB							
Autonomy	23	4.27	0.81	70	4.14	0.84	0.005
Environmental Mastery	23	4.00	0.78	70	4.12	0.92	0.004
Personal Growth	23	4.67	0.58	70	4.94	0.68	0.031
Positive Relations with Others	23	4.70	0.80	70	4.75	0.82	0.000
Purpose in Life	23	4.33	0.78	70	4.63	0.85	0.023
Self-Acceptance	23	4.13	0.96	70	4.23	1.01	0.002

*p < .05
**Partial Eta-Squared

The third research question asked whether there is a relationship between generational status and college adjustment controlling for age, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and the type of student housing. To address this question, four separate hierarchical multiple regression analyses were performed. Age, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing were entered as step one. Generational status was entered as step two. The dependent variables were academic adjustment, social adjustment, personal-emotional adjustment, and attachment. Tables 6 through 9 present the results from the regression analyses for the four subscales of the SACQ.

The overall model for academic adjustment was marginally significant [$F(6, 93) = 1.998$, $p = .074$, total $R^2 = .114$]. In the first step, only age was a significant individual predictor of academic adjustment, $B = -.255$, $p = .05$. The first step accounted for an $R^2 = .066$, $p = .263$. In the second step, generational status accounted for a significant increment (.048) of variance in students' academic adjustment (Total $R^2 = .114$, $p = .026$; incremental F (6,93) = 1.998, $p = .07$). This finding suggests that after demographic and situational variables were controlled, FGCS were significantly less likely to successfully cope with the various educational demands of college than CGCS. Table 6 summarizes the results from this regression equation.

The overall model for social adjustment was also marginally significant [$F(6, 93) = 2.027$, $p = .070$, total $R^2 = .116$]. In the first step, only age was a significant individual predictor of social adjustment, $B = -.215$, $p = .05$ (step $R^2 = .094$, $p = .093$). Generational status did not explain a significant amount of variance in students' social adjustment

(incremental R^2 = .022; incremental F (1,93) = 2.263, *n.s.*). Results are displayed in Table 7.

The overall model for personal-emotional adjustment was significant [F(6, 93) = 2.255, p = .045, total R^2 = .127]. In the first step, age, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing significantly predicted personal-emotional adjustment (R^2 = .127, p = .024). In the second step, generational status did not explain a significant increment of variance in students' personal-emotional adjustment (incremental R^2 = .000; incremental F (1,93) = .032, *n.s.*). Variability in personal-emotional adjustment was significantly influenced by where students lived, with living on campus associated with higher physical and psychological well-being. Table 8 summarizes the results from this regression equation.

Finally, the overall model for attachment [F(6, 93) = .875, p = .516, total R^2 = .053] was not significant. In the first step, age, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing did not predict students' attachment scores (step R^2 = .041, p = .551) to a statistically significant degree. Similarly, after accounting for the variance explained by the variables in step 1, generational status did not explain a significant increment in variance in students' scores on attachment (incremental R^2 = .012; incremental F (1,93) = 1.232, *n.s.*). Results are summarized in Table 9.

Table 6: *Hierarchical Regression Analysis for Academic Adjustment*

Variable	*B*	*SE B*	*β*
Step 1			
Age*	-1.836	.803	-.255
Work Hours per Week	1.154	.972	.140
Employment location	-1.530	2.496	-.064
Co-curricular activities	-.050	1.053	-.005
Housing Type	1.684	2.422	.076
Step 2			
Age*	-1.993	.789	-.277
Work Hours per Week	1.472	.962	.178
Employment location	-2.258	2.464	-.095
Co-curricular activities	-.622	1.061	-.062
Housing Type	.495	2.428	.022
Generational Status*	-5.673	2.512	-.245

Note: *α = .05

Table 7: *Hierarchical Regression Analysis for Social Adjustment*

Variable	*B*	*SE B*	*β*
Step 1			
Age*	-1.636	.837	-.215
Work Hours per Week	.280	1.013	.032
Employment location	-1.158	2.600	-.046
Co-curricular activities	2.091	1.097	.198
Housing Type	1.541	2.523	.065
Step 2			
Age*	-1.747	.834	-.230
Work Hours per Week	.505	1.017	.058
Employment location	-1.671	2.606	-.066
Co-curricular activities	1.687	1.122	.160
Housing Type	.704	2.567	.030
Generational Status	-3.994	2.655	-.163

Note: α = .05

Table 8: *Hierarchical Regression Analysis for Personal-Emotional Adjustment*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-1.638	.877	-.202
Work Hours per Week	.157	1.061	.017
Employment location	2.029	2.724	.076
Co-curricular activities	.713	1.149	.063
Housing Type*	5.619	2.643	.223
Step 2			
Age	-1.624	.885	-.200
Work Hours per Week	.129	1.078	.014
Employment location	2.094	2.762	.078
Co-curricular activities	.764	1.189	.068
Housing Type*	5.723	2.722	.227
Generational Status	.500	2.815	.019

Note: *α = .05

Table 9: *Hierarchical Regression Analysis for Attachment*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-1.419	.768	-.209
Work Hours per Week	.917	.930	.118
Employment location	-1.758	2.387	-.078
Co-curricular activities	.546	1.007	.058
Housing Type	-1.061	2.316	-.050
Step 2			
Age	-1.494	.770	-.220
Work Hours per Week	1.070	.939	.137
Employment location	-2.107	2.405	-.094
Co-curricular activities	.271	1.035	.029
Housing Type	-1.631	2.369	-.077
Generational Status	-2.720	2.451	-.125

Note: *p < .05

The fourth research question asked whether there is a relationship between generational status and psychological well-being when controlling for age, gender,

number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing. To address this question, six separate hierarchical multiple regression analyses were performed. Age, gender, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing were entered as step one. Generational status was entered as step two. The dependent variables were autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance.

Tables 10 through 15 present the results from the regression analyses for the six subscales of the SPWB. In the six separate sets of hierarchical regressions, only one significant difference was found. Once demographic and situational variables were controlled, generational status was significant only for the Personal Growth subscale of the SPWB.

The overall model for autonomy [$F(7, 85) = .684$, $p = .685$, total $R^2 = .053$], including the variables from the two steps was not significant. In the first step, age, gender, the number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and the type of student housing did not account for a significant variance in autonomy (step $R^2 = .053$, $p = .567$). In the second step, generational status did not explain any incremental variance in students' level of autonomy). Table 10 summarizes the results from this regression equation.

The overall model for environmental mastery [$F(7, 85) = .784$, $p = .603$, total $R^2 = .061$] was not significant. In the first step, age, gender, the number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities,

and the type of student housing did not account for a significant amount of variance in environmental mastery (step $R^2 = .061$, $p = .483$). Similarly, generational status added no incremental variance accounted for in students' environmental mastery. The results are displayed in Table 11.

The overall model for personal growth [$F(7, 85) = 3.372$, $p = .003$, total $R^2 = .217$] was significant. In the first step, gender, hours worked per week, and employment location were significant individual predictors of personal growth (step $R^2 = .176$, $p = .009$). In addition, generational status did explain a significant increment in variance of students' personal growth (incremental $R^2 = .041$; incremental F (1,85) = 4.542, $p = .036$). This finding suggests that once demographic and situational variables were controlled, FGCS had lower growth and development than CGCS. Table 12 summarizes the results from this regression equation.

The overall model for positive relations with others [$F(7, 85) = .524$, $p = .814$, total $R^2 = .041$] was not significant. In the first step, age, gender, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing did not account for a significant variance in positive relations with others (step $R^2 = .040$, $p = .733$). Similarly, generational status did not explain a significant increment in variance of students' relationship with others (incremental $R^2 = .001$; incremental F (1.85) = .134, *n.s.*). Results are summarized in Table 13.

The overall model for purpose in life [$F(7, 85) = 1.402$, $p = .215$, total $R^2 = .103$] was not significant. In the first step, age, gender, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and

type of student housing did not account for significant variance in purpose in life (step $R^2 = .090$, $p = .219$). Similarly, after accounting for the variance explained by the variables in step 1, generational status did not explain a significant increment in variance in students' purpose in life (incremental $R^2 = .013$, $p = .256$). Table 14 summarizes the results from this regression equation.

The overall model for self-acceptance [$F(7, 85) = .502$, $p = .830$, total $R^2 = .040$], was not significant. In the first step, age, gender, number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and type of student housing were not significantly related to self-acceptance (step $R^2 = .040$, $p = .735$). Similarly, generational status explained no increment in students' sense of purpose in life. Results are displayed in Table 15.

Table 10: *Hierarchical Regression Analysis for Autonomy*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.058	.071	-.099
Gender	.278	.202	.148
Work Hours per Week	.006	.086	.008
Employment location	-.206	.214	-.106
Co-curricular activities	-.011	.091	-.013
Housing Type	-.242	.209	-.132
Step 2			
Age	-.058	.071	-.099
Gender	.278	.205	.147
Work Hours per Week	.005	.087	.008
Employment location	-.205	.217	-.106
Co-curricular activities	-.010	.094	-.013
Housing Type	-.241	.216	-.131
Generational Status	.003	.224	.002

Note: *p < .05

Table 11: *Hierarchical Regression Analysis for Environmental Mastery*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.045	.075	-.071
Gender	-.312	.215	-.155
Work Hours per Week	.125	.092	.171
Employment location	-.127	.228	-.061
Co-curricular activities	.116	.096	.135
Housing Type	.210	.222	.107
Step 2			
Age	-.046	.076	-.072
Gender	-.309	.218	-.154
Work Hours per Week	.126	.093	.172
Employment location	-.130	.231	-.063
Co-curricular activities	.113	.100	.132
Housing Type	.204	.229	.104
Generational Status	-.026	.238	-.013

Note: *p < .05

Table 12: *Hierarchical Regression Analysis for Personal Growth*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.064	.053	-.136
Gender*	-.318	.150	-.211
Work Hours per Week*	.176	.064	.321
Employment location*	-.470	.160	-.303
Co-curricular activities	.090	.067	.140
Housing Type	.137	.156	.093
Step 2			
Age	-.074	.052	-.158
Gender	-.276	.149	-.183
Work Hours per Week*	.191	.064	.349
Employment location*	-.516	.158	-.333
Co-curricular activities	.055	.068	.085
Housing Type	.061	.157	.041
Generational Status*	-.347	.163	-.227

Note: *p < .05

Table 13: *Hierarchical Regression Analysis for Positive Relations with Others*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.022	.069	-.038
Gender	-.160	.198	-.087
Work Hours per Week	.045	.085	.068
Employment location	-.317	.210	-.168
Co-curricular activities	.079	.089	.100
Housing Type	-.093	.205	-.052
Step 2			
Age	-.024	.070	-.042
Gender	-.151	.201	-.082
Work Hours per Week	.049	.086	.073
Employment location	-.328	.213	-.173
Co-curricular activities	.071	.092	.090
Housing Type	-.111	.211	-.062
Generational Status	-.080	.220	-.043

Note: *p < .05

Table 14: *Hierarchical Regression Analysis for Purpose in Life*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.028	.070	-.048
Gender	-.265	.201	-.138
Work Hours per Week	.142	.086	.205
Employment location	-.345	.213	-.175
Co-curricular activities	.113	.090	.138
Housing Type	.306	.207	.164
Step 2			
Age	-.036	.070	-.060
Gender	-.234	.202	-.122
Work Hours per Week	.154	.086	.222
Employment location	-.378	.214	-.192
Co-curricular activities	.087	.093	.107
Housing Type	.250	.213	.134
Generational Status	-.252	.221	-.130

Note: *p < .05

Table 15: *Hierarchical Regression Analysis for Self-Acceptance*

Variable	*B*	*SE B*	*β*
Step 1			
Age	-.076	.085	-.107
Gender	-.202	.244	-.089
Work Hours per Week	.079	.104	.096
Employment location	-.113	.259	-.048
Co-curricular activities	.093	.109	.096
Housing Type	.250	.252	.113
Step 2			
Age	-.075	.086	-.106
Gender	-.204	.248	-.090
Work Hours per Week	.078	.106	.095
Employment location	-.111	.263	-.048
Co-curricular activities	.094	.113	.097
Housing Type	.253	.261	.115
Generational Status	.012	.271	.005

Note: *p < .05

CHAPTER V

DISCUSSION

This chapter discusses implications of the results presented in Chapter IV. First, the findings are compared to existing literature. Following that, the study's limitations are highlighted. Next, clinical and research implications of this study are addressed. Finally, concluding remarks are presented.

Discussion of Results

The purpose of this study was to investigate whether first-generation South Asian American (SAA) college students are different from continuing-generation SAA college students in their adjustment to college and psychological well-being (PWB). In addition, the two groups of students were compared in terms of their demographic characteristics.

Demographic Characteristics

There have been no studies to date that have focused on college adjustment and psychological well-being of first- and continuing-generation SAA college students. Since student background characteristics (e.g., race/ethnicity and household income) are found to contribute to students' college-going experiences and mental health, one of the goals of this study was to examine how first- and continuing-generation college students vary in their demographic characteristics. Of the 100 participants included in the analyses, 25% identified as first-generation college students (FGCS) and 75% identified as continuing-generation college students (CGCS). Overall, this study had a high percentage of the following groups: CGCS (75%), female (74%), students living off-campus (72%), students who were employed (64%), and students who were enrolled at Wayne State University (WSU; 90%). Of the participants who were employed during the time of the study (64%), the majority worked 11-20 hours a week

(53.1%) and off-campus (64.1%). Most of the subjects identified as either Bangladeshi (42%) or Indian (40%) and significant number of these students were enrolled at WSU. This finding may reflect the demographic differences between the two universities. More specifically, WSU has significantly more South Asian American students than the University of Iowa. Most of the participants reported a high school grade point average (GPA) within the range of A+ to A- (63%) and a college GPA within the range of B+ to B- (55.3%). Thirty-seven percent of the students spent one to five hours a week participating in co-curricular activities. Lastly, most of the participants in the study reported a household income of less than $29,999 (38%).

First- and continuing-generation students were compared with respect to high school and college GPA, housing type (i.e., on versus off campus housing), employment status, employment location (i.e., on versus off campus), the number of hours worked per week, the number of hours a week spent in co-curricular activities, and household income. Significant differences were found for housing type, employment location, the number of hours a week spent in co-curricular activities, and household income.

The importance of living and working on campus has been soundly established by previous studies. Student who live and work on campus are more likely to successfully integrate socially and structurally into their campus environment (Billson & Brooks-Terry, 1982). Student who live on campus, such as in residence halls, have more opportunities to connect and interact with their peers and faculty. In addition, these students are more likely to understand how to effectively navigate and adjust to their academic environment. Past studies have found that residing on campus and campus involvement are not only associated with positive college-going experiences, but also improved academic outcomes. Students who live on campus or participate in extracurricular activities have higher levels of learning and intellectual development, critical

thinking, degree plans, sense of control, and preference for higher-order cognitive tasks (Pascarella et al., 2004; Pike & Kuh, 2005).

Consistent with previous research (Billson & Brooks-Terry, 1982; Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Pike & Kuh, 2005; Terenzini et al., 1996;), this study found that FGCS are more likely to live and work off campus than their continuing-generation peers. Furthermore, first-generation participants were more likely to work more hours per week than CGCS. Similar results have been found in previous studies (Billson & Brooks-Terry, 1982; Mehta et al., 2011; Pascarella et al., 2004; Terenzini et al., 1996). As expected, FGCS also spent significantly fewer hours per week participating in co-curricular activities compared to their peers with college-educated parents. This finding has been substantiated by previous studies (Choy, 2001; Mehta et al., 2011; Pascarella et al., 2004; Pike & Kuh, 2005; Richardson & Skinner, 1992).

Similar to previous studies (Bui, 2002; Hertel, 2002; Mehta et al., 2011; Richardson & Skinner, 1992; Soria & Stebleton, 2012; Terenzini et al., 1996; Tseng, 2004), this study also found that FGCS come from low-income families. Additionally, of the first-generation participants who were living off campus, the majority reported living at home with their families. Given that first-generation participants were more likely than CGCS to have a household income of less than $29,999 and 44% of this group identified as first-generation immigrants from South Asia, it is possible that these students lived at home because of familial and financial obligations and responsibilities. Although living at home may help students keep their expenses low during college, it unfortunately removes students from their college environment, which is key to successful college integration. Studies on college adjustment have shown that living off campus hampers students' social adjustment and integration (Billson & Brooks-Terry, 1982; Brooks-

Terry, 1988). As a result, first-generation participants may be less likely to develop positive social relationships that are important to healthy college adjustment.

Previous studies have found that first-generation students face discrimination, racism, and other forms of oppression based on their social and cultural identities (Pike & Kuh, 2005; Terenzini et al., 1996). These experiences may further impact these students' perceptions of the academic institution. It is possible that a poor sense of belonging may contribute to first-generation students' decision to live at home and avoid campus involvement opportunities.

College Adjustment

This study compared first- and continuing-generation students' ability to adapt to the various demands of college. More specifically, the study investigated if the two groups of students were different on the Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Attachment subscales of the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1989, 1999). Although CGCS scored higher on all four subscales than FGCS, the two groups were significantly different only on the Social Adjustment subscale. This finding suggests that first-generation participants experience more difficulty coping with the interpersonal-societal demands that are inherent in the college-going experience than their continuing-generation counterparts. Previous studies have also shown that students whose parents have college experiences or college degrees are better able to adjust socially in college (Brooks-Terry; 1988; Hertel, 2002; Pike & Kuh, 2005).

Living and working off campus have been associated with lower levels of social adjustment (Billson & Brooks-Terry, 1982). Because FGCS in the current study were more likely to work and live off campus, and spend fewer hours per week participating in

extracurricular activities than their peers, they may have had limited opportunities to develop and maintain socials relationships on campus.

Living off campus has also been found to negatively impact students' academic performance. Research found that students who live on campus show greater gains in learning and intellectual development (Pascarella et al., 2004; Pike & Kuh, 2005). Although first-generation students in the current study had lower scores on the Academic Adjustment subscale than CGCS, the difference was not significant. However, the current study sought to investigate the relationship between generational status and the four subscales of the SACQ while controlling for age, the number of hours worked per week, employment location, the number of hours a week spent in co-curricular activities, and the type of student housing. The results showed that generational status accounted for significant increment in variance only for the Academic Adjustment subscale.

Baker and Siryk (1999) maintain that students who score low on the Academic Adjustment subscale have low academic motivation or attitudes, are less likely to apply themselves academically, have low performance levels, and have a low sense of satisfaction with their college environment. In a longitudinal study of approximately 4,000 students, Terenzini et al. (1996) and Pascarella et al. (2004) found that FGCS took fewer courses in humanities and fine arts, completed fewer total credit hours during their first year in college, and spent fewer hours per week studying compared to their CGCS peers. Additionally, first-generation students completed significantly fewer credit hours across three years than CGCS (Pascarella et al., 2004; Terenzini et al., 1996). An additional study found that compared to CGCS, first-generation undergraduates are less likely to contribute to classroom discussions, ask questions in class, or interact with faculty and peers during the class period (Soria & Stebleton, 2012). Interestingly,

although first-generation participants in this study reported difficulty coping with the various demands of college, their experiences had no effect on their academic outcomes. In fact, FGCS and CGCS were not significantly different in their high school and college GPAs. This result is inconsistent with previous studies that found that FGCS earn lower college grades (Billson & Brooks-Terry, 1982; Pascarella et al., 2004; Ramos-Sánchez & Nichols, 2007; Riehl, 1994) and have lower high school GPAs (Riehl, 1994) than their continuing-generation peers.

This study's findings on academic outcomes are encouraging. It suggests that although first-generation SAA college students experience challenges in developing social relationships and coping with the academic demands of college, these students may not necessarily be ill-prepared to succeed academically. It is possible that the cultural values regarding educational success, and strong academic motivations and attitudes may serve as protective factors. Nonetheless, it is important to recognize that first-generation students report a host of challenges while transitioning to college. This may be due to limited social capital, family obligations, and lack of a sense of belonging within academic environment.

Since FGCS are first in their family to pursue higher education, their parents may be less equipped to provide valuable information, knowledge, and resources. As such, FGCS may have to independently learn how to navigate the college environment and succeed as an undergraduate. Furthermore, studies on Asian Pacific students from immigrant families have found that students place more value on family and have greater familial demands than their European-American counterparts (Tseng, 2004). In this present study, compared to CGCS, first-generation college students were more likely to identify as first-generation immigrants (44%). As a result, FGCS may identity more with their country of origin and collectivistic cultural values (e.g., filial piety). Individuals from collectivistic cultures were found to pursue higher

education in order fulfill familial expectations, to bring honor to the family, and to help the family financially after graduation (Bui, 2002; Dennis et al., 2005). However, strong family obligations have also been found to negatively impact students' academic achievement (Tseng, 2004).

Finally, previous research has found that the institutional climate can negatively affect students' college-going experiences. First-generation students have a less favorable perception of their college environment, which consequently impacts their sense of satisfaction and belonging in college (Pike & Kuh, 2005; Soria & Stebleton, 2012). Soria and Stebleton (2012) found a relationship between first-generation students' sense of belonging on campus and their academic engagement (e.g., frequency with which students interacted with faculty, contributed to classroom discussions, and engaged in class). Furthermore, compared to traditional college students, FGCS are more likely to encounter discrimination, racism, and other forms of oppression based on their race, ethnicity, or gender (Terenzini et al., 1996). One possible explanation for why first-generation participants in this study had lower levels of academic adjustment may be due to the university culture.

Psychological Well-Being

Since first-generation SAA participants in the study are disadvantaged in terms of their demographic characteristics and college adjustment, particularly in the areas of social and academic adjustment, the current study sought to explore how these students' mental health compares to continuing-generation SAA participants. More specifically, this study examined whether first-generation SAA college students differed from continuing-generation SAA college students on the Autonomy, Environmental Mastery, Personal Growth, Positive Relations with

Others, Purpose in Life, and Self-Acceptance subscales of the Scales of Psychological Well-Being (SPWB; Ryff, 1989).

With the exception of the Autonomy subscale, FGCS had lower mean scores on the remaining five subscales of the SPWB than CGCS. However, the differences were not significant. This result is notable in light of the findings that FGCS face greater difficulty in social adjustment, as well as academic adjustment when key demographic and situational variables are controlled. This result has significant implications for understanding the mental health of FGCS, who have been found to be culturally, socially, and economically at risk due to their first-generation status.

The lack of difference in PWB level between FGCS and CGCS is inconsistent with previous research findings. Bowman (2010) conducted a longitudinal study which explored the changes in psychological well-being in 3,801 first- and continuing-generation college students from 19 different types of educational institutions using the SPWB measure. Bowman (2010) found that although PWB differences between the two groups of students were minimal at the beginning of the freshman year, FGCS students experienced a decline in PWB, particularly in the areas of autonomy, personal growth, and positive relations with others. Bowman (2010) also found that when controlling for various pre-college attributes and college experiences, students who were male, Asian/Pacific Islander, and had low high school GPA had lower gains in PWB compared to students who were female, White non-Hispanic, and with high high school GPA.

Baker and Siryk's (1999) Personal-Emotional Adjustment (PEA) subscale of the SACQ focuses on a "student's intrapsychic state during his or her adjustment to college, and the degree to which he or she is experiencing general psychological distress and any concomitant somatic problems" (p. 15). One of two clusters within this subscale is Psychological. This cluster

measures a student's "sense of psychological well-being" (p. 15). Although Baker and Siryk's (1999) call this cluster, "psychological well-being," it is essentially measuring students' hedonic or subjective well-being. Nevertheless, the PEA subscale and its clusters may provide insight on how subjective well-being compares to psychological well-being as measured by the SPWB. Although the difference was not large enough to be statistically significant, first-generation participants in this study scored lower on the PEA subscale than CGCS. This suggests that first-generation participants in the current study may experience higher levels of psychological concerns and lower levels of psychological well-being. Ryff et al. (2003) contended that PWB is higher among racial and ethnic minorities that experience greater levels of adversity. As such, it is possible that PWB may not have been significantly different between FGCS and CGCS because of first-generation students' ability to overcome obstacles related to their first-generation status.

Since mental health may be impacted by demographic characteristics as well as by college-going experiences, the current study investigated whether there is a relationship between generational status and psychological well-being while controlling for various demographic and situational variables. The results showed that generational status did explain a significant increment in variance of students' personal growth. This finding suggests that once demographic and situational variables were controlled, FGCS had lower growth and development than CGCS. This finding is consistent with previous research. Bowman (2010) found that although PWB differences between first- and continuing-generation college students at the beginning of the college year were minimal, during the course of the academic year, first-generation freshmen experienced a decrease in personal growth, as well as autonomy, positive relations with others, and overall PWB.

One possible explanation for why first-generation participants reported lower levels of personal growth may be due to low self-esteem and academic self-efficacy. Self-esteem has been found to be the single most important predictor of well-being among FGCS. In particularly, it has been found to be positively correlated with greater life satisfaction, lower levels of stress, and fewer psychological symptoms (Wang & Casteñeda-Sound, 2008). First-generation students' subjective perception of their continued development may be hampered by their demographics and other variables, such as housing type and employment location. These characteristics may result in personal stagnation and limited potential to change and grow.

Study Limitations

As with all research, the current study has limitations that need to be acknowledged. Data was collected using an online survey in English that took approximately 45 minutes to complete. This may have restricted participants to those who have technological knowledge, access to a computer, proficiency in the English language, and time. In addition, because the study used self-report measures it cannot be determined how truthfully respondents answered the questions or if social desirability affected the responses. Furthermore, participants were not chosen randomly. It is possible that students who participated in the study were those who were more concerned about by their college-going experiences and/or well-being, were invested in contributing to research, encouraged to complete the study by someone they respected or valued, and/or were interested in the research compensation.

The participants were recruited from two distinct Midwestern public research universities, UI and WSU. Wayne State University is an urban, commuter university that has a high percentage of SAA student population. At the time of the study, the majority of the participants were enrolled at WSU (90%) and lived off campus (72%). As such, the findings

may not be an accurate representation of SAA undergraduates enrolled in four-year institutions, who reside on campus, or who attend public liberal arts and sciences universities. Next, although data were collected after the first half of the Fall semester, first-year students or transfer students may not have had sufficient time to adjust to the college environment. Lastly, since students completed the survey either during the Fall 2013 or Spring 2014 semester, changes in their adjustment to college or mental health over the course of the academic year cannot be determined.

Other significant limitations are the study's sample size (N=100) and sample demographics, which may limit the generalizability of the findings. The majority of the participants identified as either Bangladeshi (42%) or Indian (40%). In contrast to UI, WSU is predominately a commuter school with a large percentage of SAA students and a greater percentage of Bengali-American and Indian-American students. The sample also had disproportionately high numbers of continuing-generation students (75%), female students (74%), and students living off-campus (72%). Lastly, the study's small percentage of first-generation students (25%; 80% of whom identified as Bangladeshi) may have further obscured the differences between the two groups.

An additional limitation of this study is how FGCS and CGCS were defined. Students whose parents attended a two-year college or dropped out of college were considered continuing-generation students, not first-generation students. Furthermore, parents of CGCS who pursued college in their native country may not have had similar experiences as those of CGCS who pursued college in the U.S. As such, it is possible that these CGCS's college-going experiences may have been more similar to their first-generation peers than to other CGCS. Additionally,

siblings or close relatives may be important sources of social capital. The current study did not examine the influence of relatives on college adjustment and well-being of FGCS.

Finally, any study looking at student demographics is limited in its conclusions due to the complex nature of cause and effect, and the inability to conduct a randomized control trial. Consistent with the idea of social capital theory, identifying as a continuing-generation student is associated with higher levels of college adjustment and psychological well-being. However, it is also possible that PWB and college-going experiences may also predict the extent to which students expand their social capital. Furthermore, the study did not focus on the relationship between college adjustment and PWB. It is possible that these variables may have impacted each other. Finally, the study did not attend to mediating variables (e.g., social support) that may have explained the relationship between generational status and the two measures, SACQ and SPWB.

Implications for Clinical Practice

The findings have significant practical implications for college/university psychologists, counselors, or therapists working with first-generation college students. First, mental health professionals must be cognizant of the need to provide culturally competent services to first-generation racial and ethnic minority college students. Media and anecdotal accounts often influence perceptions of immigrant and minority groups. In the U.S. for instance, a common misconception is that Asians are a monolithic group. Asians are a diverse racial group from a variety of cultural and ethnic backgrounds. The continent of Asia is divided into multiple regions, each of which is comprised of several countries. South Asia, for example is comprised of approximately eight different countries. These countries are ethnically, culturally, socially, and linguistically diverse. When working with first-generation students from South Asia,

clinicians must make an effort to identify ethnic and cultural differences, including attitudes and beliefs about academic success and mental health. Moreover, clinicians should be careful not to ascribe to the model minority stereotype that suggests that all Asian American students are academically and socially successful, and do not experience psychological or emotional distress. A more accurate understanding of the diversity of South Asian cultures would guide mental health professionals to attend to students' background, intersecting identities, strengths, and preferences in order to provide culturally-sensitive services.

A consideration of the intersection of ethnicity, age, gender, religion, sexual orientation, (dis)ability, socioeconomic status, immigration status, and other aspects of identity is key to client conceptualization and treatment planning. The association between client variables and their well-being has been substantiated by previous studies. For example, Bowman (2010) found that students who identified as male and Asian/Pacific Islander had lower gains in their psychological well-being compared to students who were female and White non-Hispanic.

It is likely that first-generation students' intersecting identities and demographic characteristics impact their adjustment to college and mental health. The process of adjusting to college may be influenced by various stressors. Experience with racism and discrimination, for example, can make navigating the academic environment challenging for even the most resilient and motivated college student. According to the literature, first-generation students are more likely to encounter discrimination based on their race, ethnicity, or gender (Terenzini et al., 1996). This can impact their sense of belonging in college, academic engagement, and well-being. Considering background characteristics and the various aspects of the identities of FGCS may help clinicians to more effectively contextualize students' concerns and develop a culturally

responsive treatment plan that promotes social justice and empowers nontraditional college students.

Since parents of FGCS have not attended a post-secondary institution, they are unable to transfer valuable knowledge, information, and resources about college to their children. Consequently, FGCS enroll in college with limited to no social capital and are therefore often handicapped in understanding the culture of higher education and its role in personal and professional development. Students' college-going experiences and mental health are not mutually exclusive; one is likely to impact another. For instance, a student's inability to develop effective study skills may increase their anxiety levels. Since many university counselors and therapists act as liaisons to the larger university community, including departmental units and student groups, they are in a good position to share information about student services and resources that would enhance first-generation students' social and cultural capital. Providing information about free tutoring services, financial assistance, academic advising, or campus activities that align with students' interests will likely help FGCS succeed academically, personally, and socially.

First-generation participants in the current study had low mean scores on all four subscales of the SACQ. However, only the scores on the Social Adjustment subscale were significantly different between the two groups of students. Previous studies have found that residing and working campus off campus are associated with lower social and structural integration (Billson & Brooks-Terry, 1982). Because first-generation SAA students were significantly more likely to work and live off campus, and spend fewer hours per week participating in extracurricular activities than their continuing-generation peers, they may have had limited opportunities to develop and maintain social relationships with peers and faculty on

campus. College mental health providers must consider South Asian values related to social connectedness and strive to help these youth develop and maintain healthy social relationships by encouraging ongoing involvement in social activities.

The current study found that when various demographic and situational variables were controlled first-generation participants were significantly less likely to succeed in coping with the various educational demands than their continuing-generation peers. Providers might consider several approaches to promote greater academic engagement among FGCS. For instance, providers can develop and implement outreach services related to academic skills for first-generation minority students. In addition, clinicians can work with faculty and university staff to discuss ways to design and provide systematic and comprehensive academic support services, such as study groups and mentorship programs. Furthermore, professional development seminars may provide knowledge about the unique challenges faced by FGCS. Such seminars can highlight ways to design and implement instructional strategies that are tailored to fit the unique needs of students in classrooms.

Constantine and Sue (2006) maintain that optimal human functioning or positive psychology is culture bound. Therefore, the definition of well-being is likely to vary between people of color and White-Americans. Application of Western definitions of optional well-being to racial and ethnic minority groups may prevent clinicians from providing culturally competent mental health services. Mental health providers must explore and identify how first-generation SAA students understand and conceptualize psychological functioning in the context of their culture. This understanding would not only prevent providers from pathologizing client issues, but also enable them to better promote positive mental health outcomes.

Although not significant, first-generation SAA college students reported lower levels of PWB and higher levels of psychological distress than their continuing-generation counterparts. Previous studies have reported similar results. For example, Piorkowski (1983) found that low-income, urban FGCS reported significantly higher levels of emotional and psychosocial problems. In addition, Bowman (2010) found that FGCS experience decline in their overall PWB during the academic year compared to CGCS. Previous studies have showed that Asian American students tend to present with or report somatic symptoms more often than their non-Asian American peers. In a study by Wang and Castañeda-Sound (2008), which included a high percentage of Asian American students, the researchers found that FGCS reported higher somatic symptoms than CGCS. Students experiencing somatic symptoms were more likely to seek medical care rather than mental health services (Wang & Castañeda-Sound (2008). As such, it is important for mental health professionals to collaborate with medical care providers (e.g., primary care physicians, psychiatrists) to provide the best clinical practice to first-generation SAA students. Additionally, given the stigma associated with mental illness within any Asian groups (Kim et al., 2001), clinicians should make effort to destigmatize mental health issues through outreach and community engagement.

Ryff et al. (2003) suggests that PWB is higher among racial and ethnic groups that face greater adversity. In the current study, although FGCS had lower PWB mean scores than CGCS, the differences were not significant. The lower PWB mean scores among FGCS may have been due to chance. Academic motivation and attitude, social support, and other factors may have contributed to first-generation students' well-being. Clinicians should explore how these students identity, resiliency, cultural values, and other factors contribute to their well-being.

Compared to continuing-generation participants, first-generation participants in this study reported lower levels of personal growth when demographic and situational variables were controlled. This finding may be explained by first-generation students' low self-esteem and academic self-efficacy. Self-esteem has been found to be the single most important predictor of well-being in FGCS (Wang & Casteñeda-Sound, 2008). Treatment should address issues related to self-esteem and academic self-efficacy in order to help students gain a stronger sense of self. Furthermore, providers should provide interventions that aim to enhance students' self-confidence and competence. For instance, mindful self-compassion training may help alleviate students' insecurities and instill kindness and encouragement.

Lastly, Ryff argues that compared to psychopathology, positive mental health has received limited attention within the psychological literature (Ryff, 1995; Ryff & Singer, 1996). However, positive psychology has been a key aspect of Counseling Psychology. Counseling Psychology has historically focused and continues to focus on positive well-being and the need to foster human capacities and strengths. Counselors and therapists, particularly those in the field of Counseling Psychology must seek to integrate positive, strength-based approaches to their clinical work. Psychotherapy should not only focus on ways to alleviate pain and psychosocial distress, but also help nontraditional students thrive psychologically by developing treatment plans that aim to optimize their well-being and functioning.

Implications for Future Research

To date, there has been no research on first-generation SAA college students. This study is the first to focus specifically on the experiences of first- and continuing-generation SAA students. Future research can expand upon the current findings to investigate the relationship between generational status and adjustment to college and generational status and psychological

well-being among racially and ethnically diverse college students, including students of Asian American background. In addition, exploration of the relationship between college-going experiences and well-being may explain how college adjustment and mental health influence each other in a bidirectional fashion.

The limited research on Asian American college students may be explained by the model minority myth, which describes Asian Americans as socially and economically successful. This stereotype can be detrimental to the Asian American students, including SAA students because it views these students as high-achieving and assumes that they do not experience mental health issues. As a result, issues facing Asian ethnic groups have either been obscured or overlooked within the literature. In addition to racializing Asian Americans as successful model minorities, mainstream American society also erroneously considers Asian Americans as a monolithic group. In fact, Asia is comprised of various different ethnic groups, each with its distinctive cultural heritage, tradition, language, religion, and so forth. These unique demographic and cultural characteristics make Asian ethnic groups unique and diverse. Gloria and Ho (2003) found differences in the environmental, social, and psychological experiences of six ethnic groups of Asian American undergraduates. Moreover, contrary to the model minority stereotype, Strage (2000) found that the Southeast Asian American students reported the lowest academic achievement, academic persistence, and confidence in academic pursuit compared to their White and Hispanic peers. These results confirm that the model minority image may be best understood as a myth or stereotype because it overlooks within- and between-group variability. It is critical for future research to examine college-going experiences and psychological functioning of various Asian and South Asian ethnic groups and how these groups compare to each other.

The current study did not examine the relationship between participants' college-going experiences (e.g., academic outcomes) and their PWB. College can be an exciting period for many students. It is a time in which students develop their intellectual competency, establish identities, learn to become autonomous, develop valuable social relationships, learn to effectively manage emotions, and much more. Paradoxically, many students experience mental health concerns, such as depression and anxiety while transitioning to college. Additionally, students may enter college with preexisting psychological problems that may further impact their ability to successfully adapt to college. Research has shown that psychological symptoms inhibit students' academic functioning (Piorkowski, 1983). Underrepresented students who are first in their family to attend college may be particularly at risk for poor psychological health as a result of their demographic background, generational status, and limited social capital. Future studies may consider exploring the relationship between adjustment to college, psychological well-being, and mental health issues.

In this study, participants were categorized as continuing-generation if they had at least one parent who attended college/university or earned a college degree either inside or outside the U.S. Parents of CGCS who attended a two-year college, attended college outside the U.S., or had some college experience may be different from parents who completed a bachelor's degree in the U.S. The children of these parents may be more similar to their first-generation peers. One previous study found that overall, the first year experience was different for students whose parents had not attended college, students for whom both parents had some college experience but received no degree, and students for whom both parents had at least a bachelor's degree (Bui, 2002). When parents understand the process of adjusting to college and academic environment they may be able to help their children transition to college. Additionally, siblings or close

relatives may be important sources of social capital for FGCS and CGCS. To understand how parents' educational levels may impact college adjustment and mental health of their children, future research may consider categorizing students into more than two groups based on parents' educational level. This methodology may provide more direct and appropriate comparisons. Furthermore, studies must examine how various forms of social capitals (e.g., peer support, faculty support) may moderate the challenges associated with college for first-generation students.

Future research should also examine how non-cognitive variables, such as parental support and academic self-efficacy impact students' college adjustment and well-being. Examining how students' generational status may moderate the link between non-cognitive factors and various dimensions of college and mental health may further elucidate the similarities and differences between the two groups of students. Non-cognitive variables have been found to be relevant in understanding the college experiences of traditional and nontraditional college students. Wang and Castañeda-Sound (2008), for example, found a difference between well-being and academic self-efficacy, self-esteem, and perceived support from family and friends among FGCS and CGCS. Additionally, these researchers also found that students' generational status moderated the relationship between perceived support from family and students' stress levels. Wang and Castañeda-Sound's (2008) study highlights the importance of looking at relevant variables to better understand the unique experiences of first- and continuing-generation college students.

Qualitative studies may further enhance our understanding of cultural constructs related to well-being, the various challenges that are associated with students' first-generation status, and the process by which FGCS are able to overcome academic obstacles and achieve high

levels of PWB. Examining how adverse experience may foster optimal human functioning in SAA students may have a significant implication for professionals working with this population. Additionally, this study did not assess psychological disorders or problems that are faced by FGCS. This was not to corroborate the model minority myth. Rather, the goal was to move away from traditional studies that have historically focused on psychological dysfunction and instead move toward investigating students' positive mental health. Nevertheless, it would be important for future studies to focus on both psychological concerns and positive mental health between first- and continuing-generation SAA college students.

Finally, the results of this study are limited because it was a cross-sectional study that included a small percentage of FGCS, data was obtained from two very distinct Midwestern universities, and participants completed an online survey at only one point during the 2013-2014 academic year. To further validate the research findings, a longitudinal study that includes students from multiple universities with large FGCS populations would need to be conducted.

Conclusions

This research has demonstrated that first- and continuing-generation college students vary in their college adjustment and psychological well-being. It has shown that first-generation SAA college students are particularly disadvantaged in the areas of academic and social adjustment compared to their continuing-generation peers. In addition, although compared to CGCS, FGCS had lower mean scores on the majority of the subscales of PWB, only the Personal Growth subscale was significant. Based on the results presented in this study, clinicians must understand and contextualize the experiences of racial and ethnic minority students who are first in their family to pursue higher education. It is also important that mental health professionals help nontraditional youth transition successfully into college and thrive psychologically by

identifying, developing, and implementing culturally appropriate instructional strategies, programs, services, and treatments.

APPENDIX A

INFORMED CONSENT

The following Consent Form provides information about this dissertation research study to help you decide if you want to participate. Please read the form and electronically sign at the bottom to acknowledge that you have read and understood the document.

DISSERTATION TITLE: The Effects of Generational Status on College Adjustment and Psychological Well-Being among South Asian American College Students

WE ARE INVITING YOU TO BE IN THIS STUDY BECAUSE:

1. You identify yourself as a South Asian American (***South Asians*** are individuals who were born in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, or Sri Lanka. ***South Asian Americans*** are South Asians who are living in the United States of America)
2. Both of your parents were born in South Asia
3. You are between the ages of 18 and 22 years
4. You are enrolled in 9 or more credit hours as an undergraduate at either The University of Iowa or Wayne State University

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to see if first-generation South Asian American college students are different from continuing-generation South Asian American college students in their adjustment to college and psychological well-being. In the present study, first-generation college students (FGCS) are defined as participants for whom neither parent has attended a college/university nor earned a college degree in the U.S. or elsewhere. In contrast, continuing-generation college students (CGCS) are defined as participants who have at least one parent who attended a college/university or earned a college degree in the U.S. or elsewhere.

HOW MANY PARTICIPANTS WILL TAKE PART IN THIS STUDY?

Approximately 100 students will take part in this study.

WHAT IS INCLUDED ON THE ONLINE SURVEY?

If you agree to participate, we would like for you to complete the three questionnaires:

1. **Demographic Questionnaire** – Asks questions about the university you are currently enrolled in; whether you identify yourself as a FGCS or CGCS; your age; your gender; your parent's ethnic group; your primary ethnic group; if you are a FGCS, whether you have (an) older sibling(s) or (a) close relative(s) with college experience or college degree; your parent's educational level; your generational status in terms of immigration; how long have you resided in the U.S. and the name of the country you were born in; whether you plan on leaving the U.S. to your country of origin after completing your undergraduate degree; your marital status; your high school cumulative grade point average; your college year during the 2013-2014 academic year; the number of credit

hours you are currently enrolled in; your college cumulative grade point average ; whether you live on or off campus; your work status (e.g., whether you work, where do you work, and how many hours do you work); number of hours you spend in co-curricular activities; and your household income.

Please note that in the Demographic Questionnaire, majority of the items will require an answer. There are few items that may not be applicable to you, and therefore, you may skip them (question items 12, 18, 21, and 22). If you do not feel comfortable answering the questions, you can choose to stop taking the survey.

2. **Student Adaptation to College Questionnaire** (SACQ) - Assesses the quality of your academic, social, physical, and emotional adjustment to college. Examples of sample items:
    - "I am finding academic work at college difficult."
    - "I feel that I fit in well as part of the college environment."
    - "I am experiencing a lot of difficulty coping with the stresses imposed upon me in college."
    - "I expect to stay at college for a bachelor's degree."

    If you find a question difficult to answer in the SACQ, you may skip that question.

3. **Scales of Psychological Well-Being** (SPWB) - Measures varying aspects of your psychological well-being, such as independence, personal growth, and relationships with others. Examples of sample items:
    - "I tend to worry about what other people think of me."
    - "I am quite good at managing the many responsibilities of my daily life."
    - "I am the kind of person who likes to give new things a try."
    - "I find it difficult to really open up when I talk with others."

    If you find a question difficult to answer in the SPWB, you may skip that question.

HOW LONG WILL THE SURVEY TAKE?

The online survey will take approximately 45 minutes to complete. Please note that you will not be able to save the survey and return to it at a later time so it must be completed in one sitting.

WILL MY INFORMATION REMAIN CONFIDENTIAL?

We will keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people such as those indicated below may become aware of your participation in this study and may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you.

- federal government regulatory agencies,
- auditing departments of the University of Iowa, and
- the University of Iowa Institutional Review Board (a committee that reviews and approves research studies)

To help protect your confidentiality, your data will be recorded using an ID code number. We will not collect any identifying information about you for the actual survey so it will not be possible for us to link you to your study information. Your data will be kept in a secure server and only those directly involved with the research will have access to the data. The results of the study will be presented in the form of group averages that include data from every participant. If we write a report about this study, we will do so in such a way that you cannot be identified.

WHAT ARE THE RISKS OF THIS STUDY?
There are minimal risks for participation in this research study. Foreseeable risks may include loss of confidentiality if you decide to enter your name and email address for a chance to win a gift card. In addition, you may experience emotional discomfort, such as feelings that might occur while talking with close friends about a difficult topic. If you find a question difficult to answer in the SACQ and/or SPWB, please skip that question.

You will be asked to provide information over the Internet. It is possible that your responses could be viewed by persons who have access to the computers hosting the web site or by unauthorized persons who gain access to the web site computers. We will use a secure web site and computers to collect the study information and we will not collect any information in the on-line questions or through the web site that would identify you.

WHAT ARE THE BENEFITS OF THIS STUDY?
You may not benefit directly from participating in this study. However, we hope the information gained from this research study will benefit South Asian American (SAA) college students. For example, your participation may result in the identification of appropriate clinical and educational guidelines, procedures, programs, services, and treatments when working with SAA students to promote their academic success and well-being in the future.

WILL I BE COMPENSATED FOR PARTICIPATING?
After completing the online survey, you will have the option to enter a drawing to win one of twenty-five $5 gift cards to Subway or one of three $25 gift cards to Target. You will be directed to a link to a separate and secure page where you can enter your name and email address. The drawing will be held when the data collection for the study is complete. Your email address will <u>not</u> be linked to your survey responses. Upon completion of the drawing, your contact information will be destroyed.

IS PARTICIPATION IN THIS STUDY VOLUNTARY?
Your participation in this research study is completely voluntary. You may choose not to participate. If you choose to participate in this study, you may withdraw at any time, even after you have completed the survey. If you decide not to be in this study, or if you stop participating at any time, you will not be penalized or lose any benefits for which you otherwise may qualify.

WHAT IF I HAVE QUESTIONS?
If you have any questions about the research study, please contact Munni Deb at munni-deb@uiowa.edu or via mail at 361 Lindquist Center, Psychological and Quantitative Foundations, The University of Iowa, Iowa City, IA 52242. This study is conducted under the supervision of Dr. Elizabeth M. Altmaier, Ph.D., Professor of Counseling Psychology at The

University of Iowa. Dr. Altmaier may be contacted at elizabeth-altmaier@uiowa.edu, by phone 319-335-5566, or via mail: 360 Lindquist Center, Psychological and Quantitative Foundations, The University of Iowa, Iowa City, IA 52242

If you have questions about the rights of research subjects, please contact the Human Subjects Office, 105 Hardin Library for the Health Sciences, 600 Newton Rd, The University of Iowa, Iowa City, IA 52242-1098, (319) 335-6564, or e-mail irb@uiowa.edu. To offer input about your experiences as a research subject or to speak to someone other than the research staff, call the Human Subjects Office at the number above.

Clicking the button below and completing the online survey will indicate your willingness to participate in the study. If you wish to keep a copy of this information page, please save or print the page before going on to the survey.

If you do not wish to be in the study, please close your web browser window now or at any time before submitting the survey.

Thank you very much for your consideration. Your time, support, and assistance are sincerely appreciated!

Sincerely,

Munni Deb, B.S.
Doctoral Candidate, Counseling Psychology
The University of Iowa
munni-deb@uiowa.edu

By clicking this button, I affirm that I understand the purpose and nature of this research study and I agree to participate in this study. I understand that I am free to withdraw at any time without any penalty.

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

The following questions ask about your background. Please remember your answers will be kept anonymous and confidential.

1. ***Which of the following universities are you currently enrolled in?**
   Wayne State University, Detroit, MI: _____
   University of Iowa, Iowa City, IA: _____

2. ***In the present study, *first-generation college students* are defined as participants for whom neither parent has attended a college/university nor earned a college degree in the U.S. or elsewhere. In contrast, *continuing-generation college students* are defined as participants who have at least one parent who attended a college/university or earned a college degree in the U.S. or elsewhere.**

   ***HELP:** If one or both of your parents have attended a college/university, but did not earn a college degree in the U.S. or elsewhere, you are a continuing-generation college student.

   How do you identify yourself (please select one only)?

   ___ First-generation college student (neither of my parents has attended a college/university nor earned a college degree in the U.S. or elsewhere):
   ___Continuing-generation college student (I have at least one parent who attended a college/university or earned a college degree in the U.S. or elsewhere):

3. ***Current Age:** _____ years old

4. **Gender:** Female _____ Male _____ Transgender _____

5. ***Mother's ethnic group (please select one only):**
   _____ Afghans
   _____ Bangladeshi
   _____ Bhutanese
   _____ Indian
   _____ Maldivians
   _____ Nepalese
   _____ Pakistani
   _____ Sri Lankan
   _____ Other (please specify):
   _____

6. ***Father's ethnic group (please select one only):**

_____ Afghans	_____ Nepalese
_____ Bangladeshi	_____ Pakistani
_____ Bhutanese	_____ Sri Lankan
_____ Indian	_____ Other (please specify)
_____ Maldivians	_____

7. ***Your primary ethnic group (please select one only):**

_____ Afghans	_____ Nepalese
_____ Bangladeshi	_____ Pakistani
_____ Bhutanese	_____ Sri Lankan
_____ Indian	_____ Other (please specify)
_____ Maldivians	_____

8. **<u>If you are a first-generation college student</u>, do you have (an) older sibling(s) or (a) close relative(s) with college experience or college degree?**
   Yes, please specify: _____
   No: _____

Questions 9 and 10 ask about the highest education completed by your parents.

This study is using the United States' definition of "college," which is defined as any post-secondary undergraduate education (educational grade level <u>after</u> year 12)

Example of an answer:

Mother's educational level:
Elementary/Middle School/Junior High School (1-9):
High School (9-12): **<u>completed 11th grade in Bangladesh</u>**
College (after grade level 12):
Graduate (MA, Ph.D, MD etc.):

9. **Mother's Educational Level:**
   Elementary/Middle School/Junior High School (grade level 1-9):
   High School (grade level 9-12): College (after grade level 12):
   Graduate (MA, Ph.D, MD etc.):

10. **Father's Educational Level:**
    Elementary/Middle School/Junior High School (grade level 1-9):
    High School (grade level 9-12):
    College (after grade level 12):
    Graduate (MA, Ph.D, MD etc.):

11. **Generational status in terms of immigration:**
_____ 1st (you were born outside of the U.S.)
_____ 2nd (you were born in the U.S., either parent born in the country of origin)
_____ 3rd (you and both parents were born in the U.S.; all grandparents were born in the country of origin)
_____ 4th (you and both parents were born in the U.S.; not all grandparents were born in U.S.)
_____ 5th (you, both parents, and all grandparents were born in the U.S.)

12. **<u>If you were not born in the United States</u>, how long have you resided in the United States?**
_____ years
In what country were you born? _____

13. **Do you plan on leaving the U.S. to your country of origin after completing your undergraduate degree?**
_____ Yes
_____ No

14. **Your marital status:**
_____ Single, never married
_____ Married/partnered/living as married
_____ Divorced
_____ Separated
_____ Widowed
_____ Other (*please specify)* _____

15. **What is your high school cumulative grade point average?**
_____ A+ to A-
_____ B+ to B-
_____ C+ to C-
_____ D+ or lower

16. **During the 2013-2014 academic year, what year will you be in college?**
___ 1st Year
___ 2nd Year
___ 3rd Year
___ 4th Year
___ 5th Year
___ Beyond 5th Year

17. ***How many credit hours are you taking this semester?**
_____ 13 or more
_____ 9 to 12
_____ Less than 9

18. **What is your college cumulative grade point average? (*Skip if you are a first year student in your first semester*)**
_____ A+ to A-
_____ B+ to B-
_____ C+ to C-
_____ D+ or lower

19. **Current living situation:**
_____ Live off-campus
Please specify where and with whom (e.g., "*living in parents' home with parents and siblings*"):

_____

_____ Live on-campus
Please specify where and with whom (e.g., "*living in an on campus housing with a roommate*"):

_____

20. **Do you work?**
_____ Yes
_____ No

21. **If you work, where do you work?**
_____ On-Campus
_____ Off-Campus

22. **If you are currently working, how many hours per week do you work?**
___ 1-10 hours ___ 21-30 hours ___ 40+ hours
___ 11-20 hours ___ 31-40 hours

23. **Number of hours spent participating in co-curricular activities (e.g., volunteering at the hospital, member of the University basketball):**
___ 0 hours ___ 11-15 hours ___ 26-30 hours
___ 1-5 hours ___ 16-20 hours ___ 30 or more
___ 6-10 hours ___ 21-25 hours hours

24. **What is your household income per year (this question refers to your family's income including your own):**

_____No income	_____ 0-9,999	_____10,000-19,000
_____20,000-29,000	_____30,000-39,000	_____40,000-49,000
_____50,000-59,000	_____60,000-69,000	_____70,000-79,000
_____80,000-89,000	_____90,000-99,000	_____over 100,000

REFERENCES

Adan, A., & Felner, R.D. (1987). Unpublished data from Tuskegee Institute and Auburn University, Alabama.

Aspelmeier, J. E., Love, M. M., McGill, L. A., Elliott, A. N., & Pierce, T. W. (2012). Self-esteem, locus of control, college adjustment, and GPA among first- and continuing-generation students: A moderator model of generational status. *Research in Higher Education, 53*, 755-781. doi: 10.1007/s11162-011-9252-1

Bachman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. *Journal of Personality and Social Psychology, 35*, 365-380. doi: 10.1037/0022-3514.35.6.365

Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology, 31*, 179-189. doi: 10.1037/0022-0167.31.2.179

Baker, R. W., & Siryk, B. (1986). Exploratory intervention with a scale measuring adjustment to college. *Journal of Counseling Psychology, 33*, 31-38. doi: 10.1037/0022-0167.33.1.31

Baker, R. W., & Siryk, B. (1989). *SACQ: Student Adaptation to College Questionnaire: Manual*. Los Angeles, CA: Western Psychological Services.

Baker, R. W., & Siryk, B. (1999). *SACQ: Student Adaptation to College Questionnaire: Manual*. Los Angeles, CA: Western Psychological Services.

Baker, A. M., Soto, J. A., Perez, C. R., & Lee, E. A. (2012). Acculturative status and psychological well-being in an Asian American sample. *Asian American Journal of Psychology, 3*, 275-285. doi: 10.1037/a0026842

Billson, J. M., & Brooks-Terry, M. (1982). In search of the silken purse: Factors in attrition among first-generation students. *College and University, 58*, 57-75. Retrieved from Retrieved from http://www.aacrao.org/publications/college_and_university_journal.aspx

Bowman, N. A. (2010). The development of psychological well-being among first-year college students. *Journal of College Student Development, 51*, 180-200. doi: 10.1353/csd.0.0118

Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago, IL: Aldine Pub. Co.

Brooks-Terry, M. (1988). Tracing the disadvantages of first-generation college students: An application of Sussman's option sequence model. In S. K. Steinmetz (Ed.), *Family and support systems across the life span* (pp. 121-134). New York, NY: Plenum Press.

Bui, V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*, 3-11. Retrieved from http://www.projectinnovation.biz/csj_2006.html

Choy, S. P. (2001). Students whose parents did not go to college: Postsecondary access, persistence, and attainment. In U.S. Department of Education, National Center for Education Statistics (Ed.), *The condition of education 2001* (pp. xviii-xliii). Washington, DC: Government Printing Office. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001072

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(Supplement), S95-S120. doi: 10.1086/228943

Constantine, M. G., & Sue, D. W. (2006). Factors contributing to optimal human functioning in people of color in the United States. *Counseling Psychologist, 34*, 228-244. doi: 10.1177/0011000005281318

Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development, 46*, 223-236. doi: 10.1353/csd.2005.0023

Farber, S.S., & Felner, R.D. (1980). *Stress and coping in college students*. Unpublished manuscript.

Flescher, M. (1986). Unpublished data from Skidmore College, Saratoga Springs, NY.

Gloria, A. M., & Ho, T. A. (2003). Environmental, social, and psychological experiences of asian american undergraduates: Examining issues of academic persistence. *Journal of Counseling & Development, 81*, 93-105. doi: 10.1002/j.1556-6678.2003.tb00230.x

Hertel, J. B. (2002). College student generational status: Similarities, differences, and factors in college adjustment. *Psychological Record, 52*, 3-18. Retrieved from http://thepsychologicalrecord.siu.edu/

Hogan, M.P. (1986). Unpublished data from the University of Maryland, College Park.

House, J. D. (1997). The relationship between self-beliefs, academic background, and achievement of adolescent Asian-American students. *Child Study Journal, 27*, 95-110.

Iwamoto, D. K. (2007). *The role of racial identity, ethnic identity, and Asian values as mediators of perceived discrimination and psychological well-being among Asian American college students* (Doctoral dissertation). (UMI No. 304843235)

Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durón, K. M. (2013). First-generation undergraduate students' social support, depression, and life satisfaction. *Journal of College Counseling, 16*, 129-142. doi: 10.1002/j.2161-1882.2013.00032.x

Johnson, J. H. (1982). Life events as stressors in childhood and adolescence. *Advances in Clinical Child Psychology, 5*, 219-253. doi: 10.1007/978-1-4613-9811-0_6

Kang, S., Shaver, P. R., Sue, S., Min, K., & Jing, H. (2003). Culture-specific patterns in the prediction of life satisfaction: Roles of emotion, relationship quality, and self-esteem. *Personality and Social Psychology Bulletin, 29*, 1596-1608. doi: 10.1177/0146167203255986

Kao, G. (2004). Social capital and its relevance to minority and immigrant populations. *Sociology of Education, 77*, 172-175. doi: 10.1177/003804070407700204

Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*, 1007-1022. doi: 10.1037/0022-3514.82.6.1007

Kim, B. S. K., Atkinson, D. R., & Umemoto, D. (2001). Asian cultural values and the counseling process: Current knowledge and directions for future research. *Counseling Psychologist, 29*, 570-603. doi: 10.1177/0011000001294006

Kim, B. S. K., Atkinson, D. R., & Yang, P. H. (1999). The Asian Values Scale: Development, factor analysis, validation, and reliability. *Journal of Counseling Psychology, 46*, 342-352. doi: 10.1037/0022-0167.46.3.342

Kim, B. S. K., & Hong, S. (2004). A psychometric revision of the Asian Values Scale using the Rasch model. *Measurement and Evaluation in Counseling and Development, 37*, 15-27. Retrieved from http://www.sagepub.com/journalsProdDesc.nav?prodId=Journal201951

Kim, B. S. K., Ng, G. F., & Ahn, A. J. (2005). Effects of client expectation for counseling success, client-counselor worldview match, and client adherence to Asian and European American cultural values on counseling process with Asian Americans. *Journal of Counseling Psychology, 52*, 67-76. doi: 10.1037/0022-0167.52.1.67

Lawton, M. P. (1975). The Philadelphia Geriatric Center Morale Scale: A revision. *Journal of Gerontology, 30*, 85-89. doi: 10.1093/geronj/30.1.85

Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology, 51*, 482-509. doi: 10.1037/0022-0167.51.4.482

Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment, 38*, 377-383. doi: 10.1080/00223891.1974.10119988

Liang, C. T. H., & Sedlacek, W. E. (2003). Utilizing factor analysis to understand the needs of Asian American students. *Journal of College Student Development, 44*, 260-266. doi: 10.1353/csd.2003.0019

Lorenzo, M. K., Frost, A. K., & Reinherz, H. Z. (2000). Social and emotional functioning of older Asian American adolescents. *Child & Adolescent Social Work Journal, 17*, 289-304. doi: 10.1023/A:1007598007205

Lustman, P. J., Sowa, C. J., & O'Hara, D. J. (1984). Factors influencing college student health: Development of the psychological distress inventory. *Journal of Counseling Psychology, 31*, 28-35. doi: 10.1037/0022-0167.31.1.28

Martin, N.K. (1988). *The effects of freshman orientation and locus-of-control on adjustment to college* (Doctoral dissertation). (UMI No. 8900951)

McMurray, A. J., & Sorrells, D. (2009). Bridging the gap: Reaching first-generation students in the classroom. *Journal of Instructional Psychology, 36*, 210-214. Retrieved from http://www.projectinnovation.biz/index.html

Mehta, S. S., Newbold, J. J., & O'Rourke, M. A. (2011). Why do first-generation students fail? *College Student Journal, 45*, 20-35. Retrieved from http://www.projectinnovation.com/College_Student_Journal.html

Neugarten, B. L., Havighurst, R. J., & Tobin, S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology, 16*, 134-143. doi: 10.1093/geronj/16.2.134

Ogden, E.P., & Trice, A.D. (1986). Unpublished data from Salem College, Salem, WV.

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education, 75*, 249-284. doi: 10.1353/jhe.2004.0016

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: Vol. 2, A third decade of research*. San Francisco, CA: Jossey-Bass.

Phinney, J. S., Dennis, J., & Osorio, S. (2006). Reasons to attend college among ethnically diverse college students. *Cultural Diversity and Ethnic Minority Psychology, 12*, 347-366. doi: 10.1037/1099-9809.12.2.347

Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-generation college freshmen: A narrative approach. *Journal of Social Psychology, 143*, 707-726. doi: 10.1080/00224540309600426

Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education, 76*, 276-300. doi: 10.1353/jhe.2005.0021

Piorkowski, G. K. (1983). Survivor guilt in the university setting. *Personnel & Guidance Journal, 61*, 620-622. doi: 10.1111/j.2164-4918.1983.tb00010.x

Purswell, K. E., Yazedjian, A., & Toews, M. L. (2008). Students' intentions and social support as predictors of self-reported academic behaviors: A comparison of first- and continuing-generation college students. *Journal of College Student Retention: Research, Theory & Practice, 10*, 191-206. doi: 10.2190/CS.10.2.e

Qin, D. B., Way, N., & Mukherjee, P. (2008). The other side of the model minority story: The familial and peer challenges faced by Chinese American adolescents. *Youth & Society, 39*, 480-506. doi: 10.1177/0044118X08314233

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401. doi: 10.1177/014662167700100306

Ramos-Sánchez, L., & Nichols, L. (2007). Self-efficacy of first-generation and non-first-generation college students: The relationship with academic performance and college adjustment. *Journal of College Counseling, 10*, 6-18. doi: 10.1002/j.2161-1882.2007.tb00002.x

Richardson, R. C., & Skinner, E. F. (1992). Helping first-generation minority students achieve degrees. *New Directions for Community Colleges, 80*, 29-43. doi: 10.1002/cc.36819928005

Riehl, R. (1994). The academic preparation, aspirations, and first-year performance of first-generation students. *College and University, 70*, 14-19. Retrieved from http://www.aacrao.org/publications/college_and_university_journal.aspx

Rings, S. L., & Washburn, M. (2011). A group intervention for first-generation college students. In T. Fitch & J. L. Marshall (Eds.), *Group work and outreach plans for college counselors* (pp. 55-63). Alexandria, VA: American Counseling Association.

Rodriguez, S. (2003). What helps some first-generation students succeed. *About Campus, 8*(4), 17-22. Retrieved from http://www.wiley.com/

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1-28. doi: 10.1037/h0092976

Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*, 472-480. doi: 10.1037/0022-3514.39.3.472

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*, 141-166. doi: 10.1146/annurev.psych.52.1.141

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069-1081. doi: 10.1037/0022-3514.57.6.1069

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science, 4*, 99-104. doi: 10.1111/1467-8721.ep10772395

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719-727. doi: 10.1037/0022-3514.69.4.719

Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2003). Status inequalities, perceived discrimination, and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health and Social Behavior, 44*, 275-291. doi: 10.2307/1519779

Ryff, C. D., Lee, Y. H., Essex, M. J., & Schmutte, P. S. (1994). My children and me: Midlife evaluations of grown children and of self. *Psychology and Aging, 9*, 195-205. doi: 10.1037/0882-7974.9.2.195

Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics, 65*(1), 14-23. doi: 10.1159/000289026

Saenz, V. B., Hurtado, S., Barrera, D., Wolf, D., & Yeung, F. (2007). *First in my family: A profile of first-generation college students at four-year institutions since 1971*. Los Angeles: Higher Education Research Institute, University of California at Los Angeles.

Saracoglu , B. (1987). Adjustment of learning disabled students to university as related to self-esteem and self-efficacy beliefs. Unpublished master's thesis, York University, York, Ontaio, Canada

Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. *Journal of Consulting and Clinical Psychology, 46*, 932-946. doi: 10.1037/0022-006X.46.5.932

Schmidt, W. C. (1997). World-wide web survey research: Benefits, potential problems, and solutions. *Behavior Research Methods, Instruments & Computers, 29*, 274-279. doi: 10.3758/BF03204826

Schwartz, S. J., Waterman, A. S., Umaña-Taylor, A. J., Lee, R. M., Kim, S. Y., Vazsonyi, A. T., . . . Williams, M. K. (2013). Acculturation and well-being among college students from immigrant families. *Journal of Clinical Psychology, 69*, 298-318. doi: 10.1002/jclp.21847

Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The Self-Efficacy Scale: Construction and validation. *Psychological Reports, 51*, 663-671. doi: 10.2466/pr0.1982.51.2.663

Soria, K. M., & Stebleton, M. J. (2012). First-generation students' academic engagement and retention. *Teaching in Higher Education, 17*, 673-685. doi: 10.1080/13562517.2012.666735

Strage, A. (2000). Predictors of college adjustment and success: Similarities and difference among Southeast-Asian-American, hispanic and white students. *Education, 120*, 731-740, 721. Retrieved from http://www.projectinnovation.com/Education.html

Sue, S., & Okazaki, S. (1990). Asian-American educational achievements: A phenomenon in search of an explanation. *American Psychologist, 45*, 913-920. doi: 10.1037/0003-066X.45.8.913

Sy, S. R., Fong, K., Carter, R., Boehme, J., & Alpert, A. (2011). Parent support and stress among first-generation and continuing-generation female students during the transition to college. *Journal of College Student Retention: Research, Theory and Practice, 13*, 383-398. doi: 10.2190/CS.13.3.g

Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education, 37*, 1-22. doi: 10.1007/BF01680039

Trice, A. D. (1985). An academic locus of control scale for college students. *Perceptual and Motor Skills, 61*, 1043-1046. doi: 10.2466/pms.1985.61.3f.1043

Tseng, V. (2004). Family interdependence and academic adjustment in college: Youth from immigrant and U.S.-born families. *Child Development, 75*, 966-983. doi: 10.1111/j.1467-8624.2004.00717.x

Veit, C. T., & Ware, J. E. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology, 51*, 730-742. doi: 10.1037/0022-006X.51.5.730

Wang, C. D., & Castañeda-Sound, C. (2008). The role of generational status, self-esteem, academic self-efficacy, and perceived social support in college students' psychological well-being. *Journal of College Counseling, 11*, 101-118. doi: 10.1002/j.2161-1882.2008.tb00028.x

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology, 33*, 448-457. doi: 10.1037/h0027806

Zalaquett, C. P. (1999). Do students of noncollege-educated parents achieve less academically than students of college-educated parents? *Psychological Reports, 85*, 417-421. doi: 10.2466/PR0.85.6.417-421

Zung, W. W. K. (1965). A self-rating depression scale. *Archives of General Psychiatry, 12*, 63-70. doi: 10.1001/archpsyc.1965.01720310065008