

An Examination of Summer Bridge Programs for First-Generation College Students

Emily Christine Otewalt

California Polytechnic State University, San Luis Obispo

March 2013

Overview

As officials in Higher Education continually push for diversity, it becomes increasingly important for students of traditionally disadvantaged backgrounds to receive extra support as they enter college. Many resources have been developed to address this issue, such as peer counseling programs, faculty mentoring programs, and federally-funded TRIO Programs, which provide students from disadvantaged backgrounds with academic preparation, admissions, and financial aid assistance (Wallace, Abel, & Ropers-Huilman, 2000). However, one noteworthy resource is a “Bridge” Program. Bridge Programs have the intention of helping first-generation college students succeed by introducing them to college campuses, taking a course for college credit, and providing peer advisors, faculty, and staff as a support system before the official school year begins (Ryujin, Breaux, & Mitshuhashi, 1999).

In 1994, only 60% of students enrolled in American universities completed a bachelor's degree within six years. Although this was sometimes due to external factors, such as insufficient financial aid, or difficulty commuting to a distant university campus, it was often due to factors related to the university climate. Students who lacked a "sense of belonging" on university campuses, and students who did not perceive their university as fostering a "supportive" environment were more likely to drop out of college than students who did (Rhee, 2008). This information is ever more critical for students from traditionally disadvantaged backgrounds, such as students of color and students from low socioeconomic strata. Students of color continually report experiencing high amounts of stress at predominately White campuses, and students from low socioeconomic backgrounds continually perceive a lack of "belonging" in college, which influences their willingness to participate in class and seek help when needed (Ostrove & Long, 2007). Bridge Programs are designed to provide academic and social support for historically low-income, first generation undergraduate students as they transition into

college. Ultimately, Bridge Programs aim to decrease the number of historically disadvantaged students who drop out of college each year.

My senior project examines past research on the effectiveness of such Bridge Programs. In particular, I will investigate which research methodologies are commonly used when examining Bridge programs. I will also offer suggestions on which evaluation methods warrant use in future assessments, so that Bridge Programs can continually be improved to meet the needs of the participating students.

The Literature Review will examine past research on Bridge Program assessments. The References section will list the resources used to complete this study.

I am personally interested in this research because of my involvement on campus. I spent two years of my college career working as a resident advisor within on-campus housing, and during that time, I got to know several first-generation college students on a very personal level. Many of them took on a dual identity as they tried to juggle their college climate, and the misguided perceptions of college that their parents had provided during their childhoods. I am interested to see how Bridge Programs are typically evaluated, and, more importantly, whether these methods measure the true impact of Bridge programs on first-generation students. I hope my research provides an incentive for these programs to continue to be evaluated in a productive manner. And lastly, I hope my research finds reasons for these Programs to continue to be funded, implemented, and improved on college campuses across the country.

Literature Review

Overview

During the last fifty years, nearly half of all students who entered a two- or four-year university withdrew without obtaining a degree. Students from low socioeconomic backgrounds, ethnic minority students, and students who were the first in their family to attend college were particularly vulnerable to this attrition (Braxton, Hirschy, & McClendon, 2005). The following literature review examines current research on the backgrounds and attrition rates of first-generation college students, how Bridge Programs aim to assist these students, and where shortcomings exist in current Bridge Program assessments.

High School Experiences

A multitude of research has examined differences in upbringings, and subsequent academic outcomes of first- and second-generation college students. At the high-school level, most first-generation college students have significantly lower SAT scores and grade point averages than do students whose parents have a bachelor's degree (Riehl, 1994). In addition, first-generation students have lower levels of information about applying to colleges and obtaining financial aid than do students whose parents have a bachelor's degree (Somers, Woodhouse, & Cofer, 2004). However, many first- and second-generation college students do not show significant differences in high school class rank when compared to their third- and fourth-generation counterparts. This suggests that first-generation college students are more likely to attend high schools where students have low grade point averages, while students whose parents attended college are more likely to attend high schools where students have high grade point averages (Riehl, 1994). This reflects an existing resource discrepancy between students of different socioeconomic backgrounds. Many students from privileged socioeconomic backgrounds attend schools with access to up-to-date academic counseling and rigorous college

preparatory coursework. On the other hand, many students from disadvantaged socioeconomic backgrounds attend schools that lack these resources (Olszewski-Kubilius & Laubscher, 1996; Riehl, 1994). Furthermore, first-generation college students are more likely to rely on guidance counselors for assistance when choosing an institution to attend, which makes the resource discrepancy all the more detrimental (Saenz & Barrera, 2007). When guidance counselors are less prepared to provide adequate college counseling for students who have nowhere else to turn, these students ultimately lack crucial information they need to be ready for college.

Early College Academic Behavior

Many first-generation college students report lower levels of self-confidence on their academic preparation for college than do students whose parents attended college (Saenz & Barrera, 2007). First-generation college students also report lower expectations for their college grade point average, and lower expectations in the highest degree they wish to attain (Ishitani, 2006; Riehl, 1994; Saenz & Barrera, 2007). These beliefs are often consistent with lower academic performance. When compared to their second- and third-generation counterparts, first-generation college students consistently obtain lower grade point averages during their first semester of college, and demonstrate higher dropout rates by the end of their freshman year (Riehl, 1994). When compared to other student groups, research has consistently found that first-generation college students are the most likely to drop out of higher education, and the least likely to attain their degree in a timely manner (Ishitani 2006).

Family Life and Socioeconomic Status

First-generation college students often come from families experiencing greater levels of economic hardship than their second- and third-generation counterparts. Lower family income directly impacts a student's college experience on both an academic and a social level. To afford the costs of attending college, first-generation college students are significantly more likely to

attend a university within fifty miles of their home, significantly less likely to live on-campus during their freshman year, significantly less likely to become involved in extracurricular activities, and significantly more likely to work part-time or full-time while attending college (Ackermann, 1991; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Rita & Bacote, 1997).

Because of their workload, first-generation college students are also less likely to enroll full-time in a four-year institution (Pascarella et al., 2004). Furthermore, first-generation college students are often the least informed about ways to obtain financial aid and student loans. They are also more likely to come from families who are resistant to incurring temporary levels of debt (Somers et al., 2004). Because insufficient financial aid is linked to higher levels of attrition, the combination of low financial resources and low awareness on ways to attain financial support can prevent these students from pursuing a college degree (Pascarella et al., 2004).

Campus Involvement in College

Success at an institution of higher education depends on a mixture of sufficient academic attainment and sufficient peer support. However, students who are working and living off-campus have less time to become involved in the academic and social atmosphere of their college campus. This can be damaging, as student involvement and a student's ability to form social bonds with their peers are two of the six key factors linked to academic retention on non-commuter campuses (Braxton et al., 2005). Peer involvement in college is also associated with higher levels of intellectual and personal development than academic study alone, and students who find worthwhile social connections in college are more likely to engage in educationally purposeful activities, such as willingly participating in class and seeking help when help is needed (Kuh, Kinzie, Buckley, Bridges, & Hayeck, 2006; Pascarella et al., 2004). Even more noteworthy, first-generation college students report a greater commitment to graduate from college once they connect with something or someone whom they deem worthwhile. Affinity

group membership, meaningful relationships with faculty members, and roles of responsibility within student organizations are examples of the types of activities that connect a first-generation student to their institution (Kuh et al., 2006). In spite of this, research suggests that first-generation college students hesitate to seek extracurricular involvement until they are first confident of competing academically (Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, & Jalomo, 1994). Because many first-generation college students enter the university system with lower confidence to begin with, it becomes a critical challenge to engage these students in extracurricular activities.

Research on Support Programs

Scholars within higher education have consistently recognized the need to improve student retention rates across university campuses. Most studies on first-generation college students conclude with ideas for developing curricula addressing the unique challenges first-generation college students face. These ideas range from mentorship programs, to comprehensive orientation curriculums, to academic advising resources, to opportunities for student social integration and leadership (Naumann, Bandalos, & Gutkin, 2003; Olszewski-Kubilius & Laubscher, 1996; Pascarella et al., 2004; Riehl, 1994; Saenz & Barrera, 2007; Woosley, Sherry, & Shepler, 2011). However, while hundreds of articles have been published with theoretical ideas on how to meet the needs of first-generation college students, relatively few studies have evaluated programs that currently exist. In particular, very few studies have measured whether currently implemented programs truly retain a greater number of first-generation students. This is a dysfunctional trend, as colleges and universities are spending large amounts of money to develop and maintain such programs, but have not demonstrated an effort to consistently review program outcomes (Rita & Bacote, 1997). Such programs should not be retained if they do not work.

Summer Bridge Programs

Summer Bridge programs have been developed in an effort to assist first-generation college students. Although the curriculum for Summer Bridge programs vary slightly at each college campus, most programs target traditionally underrepresented college students, and are designed to assist students in their transition from high school to a two- or four-year college or university. Many Summer Bridge programs are hosted on the university campus, and involve accelerated college coursework, exposure to University resources, and opportunities for students to form meaningful social connections with one another.

Prior Research on Bridge Programs

University of California, San Diego. Myers and Drevlow (1982) measured attrition rates among the incoming freshman class at the University of California, San Diego (UCSD), and found that Summer Bridge participants had the lowest attrition rates out of all incoming students at the end of their first, second, and third years in college. The UCSD Summer Bridge Program targeted 30 freshman within the university's Educational Opportunity Program (EOP), all of whom came from financially and educationally disadvantaged backgrounds, and 20% of whom were admitted into the university without meeting University Admission Requirements. Although the Summer Bridge program did not aim to remediate academic deficiencies among students, and instead focused on integrating the students onto the university campus, researchers found that Summer Bridge students showed a greater commitment to remain at their particular institution than did EOP students who chose not to attend Summer Bridge, or were unable to attend Summer Bridge due to program capacity limitations (Myers & Drevlow, 1982).

Although the Myers and Drevlow (1982) study did not measure fourth year attrition rates or graduation rates among Summer Bridge students, research on the first three years provided evidence on the benefits of a campus integration program for first-generation college students.

Myers and Drevlow (1982), noting that studies on student graduation outcomes were “uncommon” at the time, emphasized the importance of designing similar studies in which student retention rates could be easily collected and analyzed. This data could then be used to modify Summer Bridge curriculums as needed, and to continue benefitting the social and academic needs of first-generation college students. However, in the 31 years following the Myers and Drevlow (1982) study, notably little research has measured Summer Bridge program outcomes in a similar fashion.

University of California, Los Angeles. In 1991, Susan Ackermann examined the qualitative benefits of a similar Bridge Program at the University of California, Los Angeles (UCLA), but conducted no research on four-year retention rates among participating students. The Ackermann (1991) study examined 645 students, 570 of whom were incoming freshmen and 75 of whom were transfer students. In terms of gender, 310 students were male, and 335 were female. In terms of ethnicity, 232 identified as Chicano, 232 identified as African American, 129 identified as Latino/a, and 52 identified as Filipino/a.

Ackerman (1991) used Likert scales for Summer Bridge participants to report the degree to which they felt they could to “keep up” in their Fall quarter classes, found Fall quarter classes “more difficult than expected,” and considered themselves to be “part of the campus community.” Students experienced adequate levels of academic support at UCLA, and strong levels of campus integration. At the end of their first quarter, 75% of the UCLA Summer Bridge participants considered themselves to be a part of their campus community. Ackermann (1991) also found a higher than average retention rate among UCLA Summer Bridge participants at the end of their first year of college. At the end of spring quarter, 93% of UCLA Summer Bridge participants persisted, while the campus average persistence rate was 83% that year.

However, many UCLA Summer Bridge participants experienced a growing detachment

from campus life during their first year of enrollment. While only 7% of Summer Bridge participants stated that they did *not* consider themselves to be “a part of the UCLA community” at the end of their first quarter of college, 25% of Summer Bridge participants did not feel that they were a part of the UCLA community by the end of their third quarter of college. This may reflect a lack of continuous integration into the university environment during the remainder of these students’ first years of college, and may indicate the need for continual support programs throughout the academic school year.

The UCLA study was flawed in several areas. The study did not utilize control groups or non-Summer Bridge comparison groups to measure whether the campus belongingness and subjective academic preparation outcomes differed from the general student population. In addition, the study did not engage in a pre-test, post-test model to see whether a student’s sense of academic preparedness and campus inclusion was influenced by Summer Bridge participation. Finally, no research was conducted to measure if this trend continued through the next four years.

Bronx Community College. Rita and Bacote (1997) conducted a similar study to Ackermann, measuring the degree to which Summer Bridge students at Bronx Community College (BCC) found the program to be qualitatively beneficial. Of the participating Summer Bridge students, 18 were male and 34 were female. In terms of ethnicity, 24 identified as African American, 23 identified as Latino/a, and 5 identified as Asian. Like the Ackermann (1991) study, Rita and Bacote (1997) used a Likert scale to measure the degree to which Summer Bridge students felt they could to “keep up” in their Fall quarter classes, found Fall quarter classes “more difficult than expected,” and considered themselves to be “part of the campus community.”

Rita and Bacote (1997) found that 80% of the BCC Summer Bridge students reported

feeling a part of their campus community by the end of their freshman year. Persistence rates for Summer Bridge students were high, with 93% of the BCC Summer Bridge cohort persisting through the end of their first year of college (the 7% who withdrew had a cumulative GPA below 1.05, signaling extreme academic difficulty in their transition to college). However, no research was conducted on control group cohorts or second-year attrition rates, omitting important comparisons and persistence information. Like the Ackermann (1991) study, Rita and Bacote (1997) relied heavily on subjective, self-report data, but obtained no hard data on long-term student graduation and attrition outcomes.

Rutgers University. A study by Clauss-Ehlers and Wibrowski (2007) measured the outcomes of students who participated in a Summer Bridge program at Rutgers University. This study measured 95 participating students, 32 of whom were male, and 62 of whom were female. In terms of ethnicity, 27 identified as African American, 18 identified as White, 16 identified as Asian, and 34 identified as Latino/a. As with many other Summer Bridge programs, the Rutgers University Summer Bridge program featured accelerated college coursework in English, math, and science, courses on leadership training and academic success, recreational options on weekends, and an award ceremony upon completion of the program. However, this program differed from many traditional Summer Bridge programs in that students who participated were conditionally accepted into the four-year university, and were not admitted if they did not pass the Summer Bridge coursework.

Rather than use four-year retention rates or overall college GPA to examine the program's success, Clauss-Ehlers and Wibrowski (2007) used a pre-test, post-test design to measure the self-reported changes in resilience, social support, and ethnic identity among the participating first-generation college students. The results were mixed, suggesting that students did not experience statistically significant changes in ethnic identity affirmation, resilience

levels, or perceived familial support. However, they experienced increases in peer support, and were able to “cultivate valued experiences” with supervisors during the duration of the Summer Bridge program (Clauss-Ehlers & Wibrowski, 2007, p. 582). Researchers also acknowledged that most of these students showed high levels of resilience to begin with, undermining the opportunity for statistically observable increases. However, because the study did not include data on retention rates or GPA, one cannot assume that social support and resilience were sufficient on their own to keep these students enrolled in a university setting. This study relied purely on subjective, short-term data, and this data may not be representative of long-term outcomes.

Pre-Summer Bridge Programs

BOSS Camp. A study by Moore, Moore, Grimes, Millea, Lehman, Pearson, Liddel, & Thomas (2007) assessed outcomes of an early intervention bridge program. The Business Opportunities for Success School (BOSS) differed from traditional Summer Bridge programs in that it targeted potential college-bound students entering their ninth and tenth grade year of high school, rather than their first year of college. Early intervention programs were designed in response to a growing body of research suggesting that intervention programs starting as early as middle school are effective in providing “the academic preparation and encouragement that first-generation college students need” (Somers, Woodhouse, & Cofer, 2004, p. 430). To assess the effectiveness of BOSS camp, participants completed a four-question Likert scale stating whether they “learned a lot” in BOSS camp, experienced an interest in attending college because of BOSS camp, would recommend BOSS camp to other students, and found BOSS camp to be “Fun!” (Moore et al., 2007).

Like the Clauss-Ehlers and Wibrowski study (2007), the Moore et al. study (2007) measured student outcomes immediately after completing the program, suggesting that the data

may not be reflective of long-term student outcomes. The Moore et al. (2007) study also did not include control groups for comparison, or measure whether the program truly impacted rates of college attendance and retention among first-generation college students. Overall, the Moore et al. study (2007) was able to assess the students' subjective attitudes on the pre-Summer Bridge program, but utilized no quantitative data to objectively measure whether this program impacted college attendance, attrition, and graduation outcomes.

NU-Horizons. Another study on an early-intervention bridge program highlights the fact that even subjective student information can change during the course of a student's college career. The study, conducted by Olszewski-Kubilius and Laubscher (1996), examined two student groups. One group consisted of students participating in the NU-Horizons program—a pre-Summer Bridge program targeting traditionally disadvantaged youth during the summers before their sophomore, junior, and senior years of high school. The control group consisted of students who participated in a similar bridge program later in the summer, but did not come from an economically disadvantaged background.

The NU-Horizons group consisted of 55 students, 23 of whom were male, and 32 of whom were female. A complete ethnic breakdown of participants was not provided in the study, but the authors noted that a majority of students (61%) identified as either African American or Latino/a. Although some students in the NU-Horizons group had parents who had completed college coursework, most students came from families who did not complete any form of education beyond the high school level (specific numerical breakdowns were not provided in the study). All students in the NU-Horizons group also came from families that earned less than \$20,000 per year, or qualified for their schools free lunch program. At the time of the post-test, three years after completing the NU-Horizons program, 80% of NU-Horizons students were attending an in-state college, and 93.3% of NU-Horizons students were now juniors or seniors in

college (specific grade breakdowns were not provided in this study).

The control group consisted of 41 students, 28 of whom were male, and 13 of whom were female. A complete ethnic breakdown of control participants was not provided in the study, but the authors noted that a majority of students (90%) identified as either Caucasian American or Asian American. The students in the control group were more likely than the NU-Horizons group to come from families that earned more than \$50,000 per year, and with at least one parent having completed a bachelor's degree, or some form of advanced professional training (specific numerical breakdowns were not provided in the study). At the time of the post-test, three years after students completed their summer program, 87% of control group participants were attending an out-of-state college, and 93.3% of control group students were now juniors or seniors in college (specific grade breakdowns were not provided in this study).

It is important to note that students in both groups showed promise of exceptional academic achievement before participating in the summer bridge programs. Both student groups scored at or above the 90th percentile in the reading, writing, and mathematics subtests of a nationally normed, standardized achievement test (the test was not specified in this study). Because of this, the NU-Horizons students are not representative of traditional first-generation college students, who often have lower grade point averages and exhibit lower standardized test scores than second-generation college students. The NU-Horizons outcomes may not be generalizable to all first-generation college students, but they may be generalizable to first-generation college students with outstanding academic potential.

The study measured student perceptions of college at three points in time: immediately before starting their respective summer programs, immediately after completing their respective summer programs, and three years after completing their respective summer programs, when these students were officially enrolled in a university setting. Overall, the data suggested that

both groups of students experienced more realistic goal planning immediately after completing their summer bridge program, but had drastically different perceptions of a campus's social atmosphere once enrolled in a university setting. Immediately after completing their respective summer programs, students from both groups perceived college life to be "exciting, fun, and relatively easy," while acknowledging that minority groups may experience greater levels of prejudice on campus (Olszewski-Kubilius & Laubscher, 1996). The NU-Horizons group anticipated feeling lonelier than the control group, but otherwise showed no significant differences in their perceptions of campus life. However, after students were admitted into a four-year college, the NU-Horizons group found college life to be significantly more "boring, dull, and snobbish" than did the comparison group. In addition, NU-Horizons students experienced significantly greater levels of loneliness and significantly greater emotional distress when adjusting to campus life than did students from the comparison group. These differences suggest that academic preparedness alone is not enough to ameliorate social and emotional conflicts among traditionally economically disadvantaged students.

The Olszewski-Kubilius and Laubscher (1996) study highlights the importance of using post-bridge program data when assessing a bridge program's effectiveness. The feedback immediately after students completed their respective bridge programs suggested only a minor potential difference in campus adjustment levels. This data did not accurately represent the eventual perceptual differences between economically privileged and economically disadvantaged students. This is a critical pitfall in many studies which do not examine subjective student adjustment levels at a later date.

However, the NU-Horizons program did effectively help students in the planning stages of choosing a school and accessing financial aid. Upon completion of the respective summer programs, students from both groups relied on similar criteria to choose four-year colleges which

to apply. These criteria were campus prestige and the quality of school. These criteria differed from their initial criteria for applying to schools, which were the proximity of campus to their hometown, where their friends were applying, and how attractive the campus appeared. The economically disadvantaged students also gained a more realistic understanding of the financial preparation needed for college after completing the NU-Horizons program. Before participating in the program, many NU-Horizons students felt that they could completely fund their college expenses through summer job earnings and personal savings. Upon completing the summer bridge program, the NU-Horizons participants reported a greater reliance on student loans, scholarships, and part-time work to fund their college expenses.

This suggests that the NU-Horizons program assisted economically disadvantaged students, particularly when it came to goal planning and financial awareness. This is important to note, as most NU-Horizons participants experienced declining levels of emotional and academic support from their teachers and counselors during their final years of high school. In contrast, the economically privileged students in the control group perceived increasing levels of emotional and academic support during their final years of high school from faculty and support staff. This suggests that the NU-Horizons program played a significant role in closing the resource gap that often exists between students of privilege and students from disadvantaged socioeconomic families. While the NU-Horizons program was not correlated with a greater sense of belonging after students enrolled in college, it was correlated with greater awareness on how to apply for college, and how to succeed financially.

Summer Bridge Graduation Outcomes

King's College. Much of the research examined thus far has found positive outcomes for Summer Bridge participants. However, these studies have used primarily subjective measurements to assess their results, rather than objective data on four-year attrition and

graduation rates. Fortunately, not all Summer Bridge studies rely purely on subjective assessment. A 2006 dissertation by Stewart, for instance, found quantitative evidence for an effective summer bridge program. Stewart (2006) conducted an ex-post facto study, using archived student data from the pre-freshman college summer program at King's College. Stewart (2006) looked at GPA and retention outcomes of 89 students who participated in the university's Summer Bridge programs from 1998 through 2001. Stewart (2006) then compared the Summer Bridge participants to a control group of 89 students who attended King's College from 1998 through 2001, but did not participate in the summer bridge program.

Of the Summer Bridge participants, 46 were male and 43 were female. In terms of ethnicity, 83 students identified as Caucasian American, 3 students identified as African American, 2 students identified as Latino/a, and 1 identified as Asian American. Summer Bridge students had an average high school GPA of 3.02, and an average Scholastic Aptitude Test (SAT) combined score of 893 (The National Average at this time was 1018). Of the control group, 46 students were male and 43 students were female. In terms of ethnicity, 81 students identified as Caucasian American, 4 students identified as African American, 3 students identified as Latino/a, and 1 student identified as 'Other.' Control group students had an average high school GPA of 3.06 and an average combined SAT score of 905. While the control group had slightly higher high school grade point averages and SAT scores, the control group and the Summer Bridge group were closely matched in terms of ethnicity and gender.

The King's College Summer Bridge program had a goal of supporting students who were financially disadvantaged, or did not achieve their full potential in high school (measured by a discrepancy in high school GPA and SAT scores). The program consisted of enrollment in a five-week English or math course, participation in a community service project, and introductions to academic support services on-campus. Participating students lived in a

residence hall on campus. Additionally, the Summer Bridge staff met individually with each student throughout the program to highlight progress, goals, class scheduling, and any individualized areas of assistance (Stewart, 2006).

Stewart did not find a significant difference in retention rate, graduation rate, or first year GPA when comparing summer bridge participants to their non-participating cohort. It was noted that females who participated in the program graduated at higher rates than males who participated in the program, and minorities who participated in the program were more likely to graduate than minority students who did not participate, but neither of these outcomes were statistically significant. However, the four-, five-, and six-year graduation rate for Summer Bridge participants was 61%, 70%, and 70%, respectively, and this is a respectable graduation rate for a private four-year university. The four-, five-, and six-year graduation rate for non-participants was 63%, 70%, and 76%, respectively, meaning that the Summer Bridge participants were not far behind the expected graduation rate for this particular university (Stewart, 2006).

This study is useful as a prototype for future research, as it measures objective student outcomes, and, unlike many similar studies, compares this data to a control group of students from a similar background. The fact that no significant differences were noted between the control group and Summer Bridge participants suggests that this program was in fact successful. One could argue that this program successfully brought disadvantaged students “up to par” with a more privileged group. Additionally, although a significant difference was not found between participating and non-participating minority students, data did suggest more positive outcomes for participating minorities, and future research may find a significant difference where this study did not.

Ethnic Match as a Factor in Belongingness

There is reason to believe that an ethnic similarity between Summer Bridge students and faculty may yield more positive outcomes than when the two differ in this regard. Social psychological research has found that individuals tend to associate with and feel a stronger sense of attraction to those who share similar worldviews and similar physical attributes to themselves (Cabral & Smith, 2011). Furthermore, interpersonal similarity influences one's perceptions of his or her interactions with others. Individuals are more likely to trust and perceive credibility in those they initially believe to be similar to themselves than in those they initially believe to be different (Cabral & Smith, 2011). Additionally, perceived similarities increase the likelihood that one will project one's own personal traits onto another, furthering the perceived credibility cycle (Cabral & Smith, 2011). Because many first-generation college students come from ethnic minority backgrounds, it would make sense that an ethnic match between students and the Summer Bridge staff would increase a student's feeling of comfort and belongingness on campus.

Ethnic match in the therapy setting. A large body of research has already examined ethnic match in the counseling setting, mostly finding positive results when therapists and clients are matched by ethnicity. A 2000 study by Gamst, Dana, Der-Karabetian, and Kramer, for instance, examined four thousand clients who participated in an outpatient community mental health center in Southern California. Researchers found that an ethnic match between clients and therapists lead to greater positive outcomes in a client's overall level of functioning. Latino/as who received bicultural and bilingual services from a Latino/a counselor fared better than Latino/as placed with a counselor lacking these resources (Gamst et al., 2000). Additionally, Asian American clients showed the highest improvement rate out of all ethnicities when matched with an Asian American counselor. This finding is of particular importance because Asian Americans have historically had high dropout rates in outpatient mental health settings (Sue,

Chun, & Gee, 1995, as cited in Gamst et al., 2000). A variety of other studies examining ethnic match between clients and therapist have replicated these findings, suggesting that ethnic matching plays a significant role building trust, comfort, and liking toward counselors in a therapeutic setting (Flaskerud, 1990; Flaskerud & Liu, 1991; Fujino, Okazaki, & Young, 1994; Jerrell, 1998; Russell, Fujino, Sue, Cheung, & Snowden, 1996; Takeuchi, Sue, & Yeh, 1995; Yeh, Eastman, & Cheung, 1994; Zane, Enomoto, & Chun, 1994, as cited in Gamst et al., 2000).

Ethnic match in higher education. A modest number of studies on ethnic match have been conducted on students at institutions of higher education. For instance, a growing number of studies have found that Latino/a students are less likely to seek professional services for emotional support when experiencing challenges in college, particularly at predominately White institutions (Kearny, Draper, & Baron, 2005; McMiller, & Weisz, 1996, as cited in Cerezo & McWhirter, 2012). In response to such research, multiple academic programs conducted by Latino/a faculty members have been implemented to address the needs of undergraduate Latino/a students (Battencourt, Charlton, Eubanks, Kemahan, & Fuller, 1999; Bordes & Arredondo, 2005; Hernandez, 2000; Rodriguez, Bin- ham Mira, Morris & Cardoza, 2003; as cited in Cerezo & McWhirter, 2012).

The Latino Educational Equity Project. One example of these programs is the Latino Educational Equity Project, or LEEP (Cerezo & McWhirter, 2012). LEEP was a one-day intervention program completed by 40 self-identified Latino/a students from three predominately White, public northwestern universities. Results were compared to a control group of 41 self-identified Latino/a students who did not participate in any form of intervention program. In both groups, 36% were male, and 64% were female. Participants in both groups ranged from 18 to 37 years of age, with a mean of 21 years. The majority of students were in their sophomore year of college at the time of the intervention. Seventy-nine percent of LEEP participants were the first

in their family to attend college. Both the LEEP participants and the control group had a mean college GPA of 3.16 (Cerezo & McWhirter, 2012).

LEEP was conducted by a group of Latino/a graduate students, who led workshops and facilitated discussions meant to assist students in three primary areas: their social adjustment to college, their sense of cultural congruity between their home and university environment, and a critical sense of what it means to be a Latino/a in modern day institution of higher education (Cerezo & McWhirter). LEEP participation consisted of student activities and facilitated group discussions on the students' university campuses.

LEEP had mixed results overall, and was criticized for being too short, and for not effectively fostering an increased sense of cultural congruity among Latino/a students (Cerezo & McWhirter, 2012). However, it was noted by the researchers that student participants in LEEP were challenged by the transition into a predominately White university. Many LEEP participants grew up in rural, predominately Latino/a and immigrant communities, and were surprised by the difference in social class among their university peers. LEEP participants also cited language barriers as a challenge in the university setting, and claimed to interact with their family in way very different than their college classmates (Cerezo & McWhirter, 2012). While LEEP itself may not have been the ideal intervention program to address these student issues in the long-term, it is still clear that minority students face unique challenges when entering predominately white universities. Exposure to faculty, staff, and student mentors of a similar ethnic background might help these students combat these challenges.

Discrepancies in ethnic match research. Overall, much of the research examining the benefits of ethnic matching in higher education settings has obtained mixed results. Campbell and Campbell (1997) shed light to a possible reason why. When measuring a student's attitudes or preferences on a Summer Bridge program, ethnic matching is often shown to have a

significant, positive effect. When measuring objective and behavioral outcomes on a Summer Bridge program, significant effects associated with ethnic match are notably less common (Campbell & Campbell, 1997). According to Campbell and Campbell (1997), this is because the factors explaining one's beliefs, preferences, and satisfaction differ from the factors explaining one's actual behavior. This is important to note when conducting and examining future studies. Using Campbell and Campbell's (1997) interpretation, an ethnic match between Summer Bridge participants and staff may not directly impact factors such as GPA or retention rates. However, under Campbell and Campbell's interpretation, there is a strong likelihood that an ethnic match may affect student satisfaction with a Summer Bridge program.

The Importance of Evaluation

Systematic evaluation of student orientation programs is critical in ensuring a program's success (Upcraft, Mullendore, Barefoot, & Fidler, 1993). Evaluations provide constructive data, helping administrators and faculty decide if a program is meeting designated goals, and meeting the needs of participating students (Upcraft, Mullendore, Barefoot, & Fidler, 1993). In his book The Freshman Year Experience: Helping Students Survive and Succeed in College, M. Lee Upcraft (1989) recommends three methods of evaluation to determine a program's effectiveness. First, Upcraft (1989) recommends measuring a student's perception on the effectiveness of the program, as a student's perception may reflect the amount of effort they put into their participation. Second, Upcraft (1989) recommends measuring the academic achievements (grade point averages, etc.) and retention rates among participating students, as this data is the most insightful when measuring whether Summer Bridge programs are truly impacting graduation outcomes. Third, Upcraft (1989) recommends evaluating students who graduated, and students who did not, as data on students who didn't succeed can often "uncover weaknesses in program effectiveness" (p. 93). Of the three, Upcraft (1989) cites academic achievements and such

related data as the most important of the three, as most Summer Bridge programs have an ultimate goal of ensuring that first-generation students graduate from college. While Upcraft (1989) does not discount the value of measuring the others variables as part of a holistic picture, he warns that measuring subjective student data alone does not indicate true graduation rates.

Unfortunately, as shown in this literature review, most studies on Summer Bridge programs center around student perceptions of a program, and neglect to measure academic achievements, retention rates, and graduation rates (Clauss-Ehlers & Wibrowski, 2007; Moore et al., 2007; Rita & Bacote, 1997). While data on subjective student perceptions is certainly warranted and needed, many researchers make the mistake of using only student perceptions to assess program effectiveness.

Discussion

Unfortunately, there are several common, methodological flaws with the current research on Summer Bridge programs. First, much of the research on these programs measure student outcomes through the end of their freshman year, but do not continue to measure attrition rates during the following years. Past studies suggest that first-generation college students are most likely to withdraw from college during their second year of enrollment (Ishitani, 2006). As a result, many Bridge Program studies lack critical data on true college completion outcomes.

Second, much of the research on Summer Bridge programs do not contain control groups for comparison. A lack of control groups makes it impossible to determine whether a student's academic performance is truly impacted by the Summer Bridge programs. These same outcomes may have occurred without the intervention of a Summer Bridge program.

Lastly, many studies measure academic outcomes of Summer Bridge programs on a qualitative, rather than a quantitative basis. For instance, many studies measure self-report data on participants' perceived levels of academic preparation after completing a Bridge Program, but

neglect to measure the participants' grade point averages at a later date. While qualitative data is useful when measuring the degree to which students consider a program to be helpful, studies that lack hard data on grade point averages and attrition rates cannot assess whether the program has truly impacted a student's academic performance.

Overall, there is still a great need for research focused on longitudinal, quantitative assessments on Summer Bridge programs. Examples of quantitative measures include graduation rates, attrition rates, and grade point averages of participating students. More research is needed to examine Summer Bridge student outcomes versus outcomes of a control group. Additionally, more research is needed to examine whether an ethnic match is a valid factor when working with low-income, first-generation college students from an ethnic minority background. Prior research suggests that ethnic match may influence a student's attitudes toward the university system, but few published studies have actually examined this factor.

Future assessments on Summer Bridge programs should examine quantitative student data on a longitudinal scale. Future studies should focus on grade point averages, attrition rates, and four-year graduation rates of Summer Bridge participants. Summer Bridge participants should be matched to a control group for comparison. Studies should be conducted in a pre-test, post-test fashion, to examine whether a true difference occurred in students over time. In addition, future assessments should examine ethnic matching on a qualitative and a quantitative scale. Research is needed to assess whether ethnic match has a positive correlation with qualitative student perceptions of bridge programs, and quantitative grade point averages, attrition rates, and graduation outcomes.

References

- Ackermann, Susan P. (1991). The benefits of summer bridge programs for underrepresented and low transfer students. *Community /Junior College Quarterly of Research and Practice*, 15(2), 211-224.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2005). Understanding and reducing college student departure. *The Review of Higher Education*, 28 (3), 453-454.
- Campbell, T., & Campbell, D. (1997). Faculty/student mentor program: Effects on academic performance and retention. *Research in Higher Education*, 38(6), 727-742.
- Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: A meta-analytic review of preferences, perceptions, and outcomes. *Journal of Counseling Psychology*, 58 (4), 537-554.
- Cerezo, A., & McWhirter, B. (2012). A brief intervention designed to improve social awareness and skills to improve latino college student retention. *College Student Journal*, 46(4), 867-879.
- Clauss-Ehlers, C. S., Wibrowski, C. R. (2007). Building Educational Resilience and Social Support: The Effects of the Educational Opportunity Fund Program Among First- and Second- Generation College Students. *Journal of College Student Development*, 48 (5), 574-584.
- Gamst, G., Dana, R. H., Der-Karabetian, A., & Kramer, T. (2000). Ethnic match and client ethnicity effects on global assessment and visitation. *Journal of Community Psychology*, 28, 547-564.
- Ishitani T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education* 77(5), 861-885.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006, July). What

- matters to student success: A review of the literature. *Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success*. Symposium conducted at the meeting of the National Postsecondary Education Cooperative, Washington, DC.
- Moore, R. S., Moore, M., Grimes, P. W., Millea, M. J., Lehman, M., Pearson, A., Liddell, P., Thomas, M.K. (2007). Developing an Intervention Bridging Program for At-Risk Students Before the Traditional Pre-Freshman Summer Program. *College Student Journal, 41* (1), 151-159.
- Myers, Carmel and Drevlow, Susan. (1982). Summer Bridge Program.' A Dropout prevention program for Minority and Low-Income Students at the University of California, San Diego. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY March 21, 1982. (ERIC Document Reproduction Service No. ED 344 525.)
- Naumann, W. C., Bandalos, D., & Gutkin, T. B. (2003). Identifying variables that predict college success for first-generation college students. *The Journal of College Admission, 181*, 4-9.
- Olszewski-Kubilius, P., Laubscher, L. (1996). The impact of a college counseling program on economically disadvantaged gifted students and their subsequent college adjustment. *Roeper Review, 18* (3), 202-209.
- Ostrove, J. M., & Long, S. M., (2007). Social class and belonging: Implications for college adjustment. *The Review of Higher Education, 30* (4), 363-389.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First Generation College Students. *Journal of Higher Education, 75* (3), 249-284.
- Rita, E. D. S., & Bacote, J. B. (1997). The Benefits of College Discovery Prefreshman Summer

- Program for Minority and Low-Income Students. *College Student Journal*, 31 (2), 161-174.
- Rhee, B. (2008). Institutional climate and student departure: A multinomial multilevel modeling approach. *The Review of Higher Education*, 31 (2), 161-183.
- Riehl, R. J. (1994). The academic preparation, aspirations, and first-year performance of first-generation students. *College and University*, 70, 14-19.
- Saenz, V. & Barrera, D. (2007). What we can learn from UCLA's "First in My Family" data. *Retention in Higher Education*, 21(9), 1-3.
- Stewart, J. (2006). *The effects of a pre-freshman college summer program on the academic achievement and retention of at-risk students*. Available from Pro-Quest Dissertations and Theses database. (UMI No. 3208076).
- Somers, P., Woodhouse, S. R., & Cofer, J. E. Sr (2004). Pushing the Boulder Uphill: The Persistence of First-Generation College Students. *Journal of Student Affairs Research and Practice*, 41 (3). 811-828.
- Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35, 57-73.
- Upcraft, M. L., Mullendore, R. H., Barefoot, B. O., & Fidler, D. S. (1993). *Designing Successful Transitions: A Guide for Orienting Students to College*. South Carolina: University of South Carolina.
- Upcraft, M. L., Gardner, J. N., & Associates (1989). *The Freshman Year Experience: Helping Students Survive and Succeed in College*. San Francisco: Jossey-Bass Publishers.
- Wallace, D., Abel, R., & Ropers-Huilman, B. (2000). Clearing a path for success: Deconstructing borders through undergraduate mentoring. *The Review of Higher*

Education, 24 (1), 87-102.

Woosley, S. A., Sherry, A., Shepler, D. K. (2011). Understanding the early integration experiences of first-generation college students. *College Student Journal, 45 (4)*