

2016

Influence of Talent Search Program on College Readiness and Success

Donitha Jones Griffin
Walden University

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Donitha Jones Griffin

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Review Committee

Dr. Clifton Addison, Committee Chairperson, Education Faculty

Dr. Richard Hammett, Committee Member, Education Faculty

Dr. Beate Baltes, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2016

Abstract

Influence of Talent Search Program on College Readiness and Success

by

Donitha Jones Griffin

MA, Troy University, 1996

BS, University of Alabama, 1992

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

December 2016

Abstract

Precollege programs, such as Talent Search (TS), are widely used to increase college readiness skills, particularly among underrepresented students in higher education. The college examined in this study had implemented the TS program, but little empirical evidence existed about the efficacy of the program. The purpose of this ex-post facto quantitative study was to evaluate the effect that the local TS program has had on college readiness and success as measured by incoming freshmen placement exam scores and students' first-year grade point average (FYGPA). The theoretical framework for the study was Conley's 4 dimensions of college readiness designed to help students succeed beyond high school. The research questions explored the differences in the 2010, 2011, and 2012 Computer Adaptive Placement Assessment and Support System (COMPASS) reading and writing placement scores and FYGPA for TS program participants and non-TS participants. The balanced sample included all 120 local college students who had finished their freshman year. Independent sample *t* tests were conducted and no significant differences were found in FYGPA or COMPASS reading and writing scores based on program participation. To provide guidance to the local site administrators, the extant literature on precollege interventions and holistic approaches provided best practice recommendations for a white paper that included additional services not currently offered by the local TS program. Positive social change is supported through assuring appropriate precollege support that may lead to increased academic success for students, hence increasing the number of college graduates among this group.

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Dedication

This work is dedicated to all underrepresented students in higher education.

Hopefully, my work will help others understand your plight and understand that all you need is support and someone who cares enough to help you reach your desired goals.

Acknowledgments

To God be the Glory for the things that he has done. It is because of my relationship with you that I can do all things through Christ who strengthens me. To my husband, thank you for your love and support. Thank you for believing in me and for being the reason I can be me. I promise no more books or computers in bed. To my children, Calvin Jr., Cameron, and Ashlynn: Thank you for your patience and for motivating me to carry on. It is because of you that I stayed in the race until the end. To my mom, thank you for always encouraging me and supporting me in everything. I am everything I am because you love me. Dad would be so proud. To my siblings, thank you for your support. You are a true example of unconditional love. Laughing with you kept me going. To the rest of my family and friends, I appreciate your love, support, and words of encouragement. To Dr. James Mitchell, thank you for pushing me and encouraging me to see what I could not see. If not for your push, I would still be talking about enrolling in a doctoral program. A big thanks to Dr. Clifton Addison and Dr. Richard Hammett for your guidance through this process. Dr. Hammett, thank you for going above and beyond. I have learned a lot from both of you.

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Section 1: The Problem

The Local Problem

Students, especially underrepresented individuals, enter college faced with challenges for which they may not be prepared. The National Center for Education Statistics (NCES, 2010) classified underrepresented students in higher education as low income, minority, and first-generation students. NCES (2010) also reported that the underrepresented population is more likely not to attend college or to drop out of college after the first year because of academic performance. Additional studies have revealed that community colleges are often the only viable option for underrepresented students because this population is at a higher risk for not attending, not being prepared, or not completing college (Contreras, 2011; Franks, 2012; Pitre & Pitre, 2009). Contreras (2011) noted that not all underrepresented student are academically challenged, but they still require support. Underrepresented students arrive at higher education institutions with distinct success challenges other than academic concerns (Engberg & Allen, 2011; Wilson, Andrews, & Foley, 2012; Woosley & Shepler, 2011). Some identified challenges that have led to students (a) not enrolling in higher education institutions or early dropout, (b) previous academic failures, (c) lack of skills in time management and financial planning, (d) defensive attitudes, (e) lack of family support, and (f) overall lack of postsecondary education expectation that will enhance their experience and success (Byrd & MacDonald, 2005).

Since the 1950s, the acceptance and implementation of precollege programs in the United States have been instrumental in promoting student success in higher education,

especially among underrepresented populations (Perna, 2002). Contreras (2011) indicated that precollege intervention programs have been important approaches to strengthening the bridge to higher education for academically promising underrepresented students. Perna and Thomas (2006) reported the Federal TRIO programs were established under the Higher Education Act of 1965 to promote student success and to reduce gaps in success among an underrepresented population. The TRIO programs were designed to help students with academic and nonacademic issues as they progress through the academic pipeline from middle school to post-baccalaureate programs (U.S. Department of Education [USDOE], 2015). Talent Search (TS) is one of the eight TRIO programs that identifies and assists first-generation, low income, and minority students with the necessary support and college knowledge to enter and succeed in higher education. TS programs focus primarily on preparing middle and high school students for the demands of college. According to USDOE (2015), TS programs provide academic, career, and financial support to participants to increase high school graduation rates and successful completion of postsecondary education.

Southeastern Community College (SCC, a pseudonym), the community partner for this study, received a federal grant to implement the TS program under TRIO to assist with preparing high school students with the necessary college readiness skills. SCC is located in a rural region in central Alabama with a high percentage of underrepresented students. From 1,745 students attending SCC between 2010 and 2013, 74% of SCC's students were Black, 75% were low income, and 80% were first-generation college students (SCC institutional research office). According to the Alliance for Excellent

Education (2013), the underrepresented population in this region was graduating from high school at the rate of 63% lower than the state average of 72% and the national average of 79%, and even fewer were entering or graduating from college. According to the Alabama Department of Education (2010), the total postsecondary enrollment for high school graduates in the area was less than 35%. The college had three goals for implementing the TS program: (a) improving college knowledge in this region, (b) improving college readiness by providing early intervention to students who may attend SCC, and (c) increasing the overall success of incoming freshmen.

The TS program is housed on the main campus of SCC and serves more than 900 participants each year. According to Pitre and Pitre (2009), TRIO programs have been successful in increasing college attendance and graduation rates among students who are classified as low income, first generation, or students from ethnic or racial minority backgrounds. The local TS program primarily serves students from six of the nine local high schools, two middle schools, and one elementary school. Students who participate in the programs must be in Grades 6–12. Students are recruited to be a part of the program, and high school counselors are encouraged to promote the program and participation. Parents must complete an application and students must meet eligibility requirements to be accepted. According to the USDOE (2015), two-thirds of the TS participants must be low income or potential first-generation college students. To continue in the program, students must be engaged in activities throughout the year to be designated as active participants in the annual performance report that the college submits to the USDOE. Participants who are not engaged in activities are classified as inactive

and are replaced by other eligible students. The local TS program addressed specific academic and nonacademic challenges before students enrolled in SCC. Activities include group counseling, tutorial services, information on postsecondary education, summer academic enrichment programs, ACT preparation, college tours, assistance in preparing for college entrance exams, and workshops for participants and the families of participants (USDOE, 2015). At least 25%–30% of TS graduates enroll at SCC each year (fall, spring, or summer) (TS Follow-Up Report, 2012; 2013). Contreras (2011) found that intervention and precollege programs were cost effective and created the greatest results for underrepresented students compared with those who did not receive any support.

For the last 10 years, SCC experienced an increase in enrollment of underrepresented students, which included many TS alumni, and a rise in the number of students not academically prepared for college as determined by placement scores. To understand the ongoing challenges that the local college faces, it is important to know the region it serves. SCC serves five counties, which include nine high schools. The counties are considered among the most economically disadvantaged in the State of Alabama. According to the 2010 U.S. Census report, the average median income for the college's service region was \$28,031. Twenty-eight percent of the population younger than the 18 years lives in poverty, whereas the state average is 24% (U.S. Census, 2010). Social, educational, and economic needs in the area are great. Table 1 presents additional socioeconomic data for the surrounding counties.

Table 1

Socioeconomic Data for Five Surrounding Counties

County	Population	% poverty	Median income	% high school graduates >25 y	% college graduates >25 y
County 1	43,643	20.4	\$38,553	74.6	11.3
County 2	43,826	35.6	\$26,495	75.3	13.9
County 3	11,299	30.7	\$28,754	73.4	13.5
County 4	10,591	39.5	\$24,742	73.0	11.5
County 5	11,670	39.6	\$21,611	71.1	17.0

Note. U.S. Census Report 2010.

Serving underrepresented students is paralleled in the county's six largest high schools. The mission of SCC embraces educational opportunities and student access. Because SCC is the only public regionally accredited institution in the service area, the college fills vital higher education needs in three areas, including (a) providing access to higher education; (b) preparing students for 4-year institutions, and (c) developing a trained and ready workforce. Based on the demographics of the area, SCC was aware that serving this underrepresented population would continue to be a challenge. At the same time, SCC understood improved strategies and intervention would be required to help close the gap for this population of students. Therefore, SCC relied heavily on the local TS program to assist with providing early intervention and support needed for students to not only gain access but also arrive at postsecondary institutions prepared to

reach their goal of graduating, transferring to 4-year institutions, or entering the workforce.

To determine college readiness, students enrolling in SCC are required to take the ACT Computer Adaptive Placement Assessment and Support System (COMPASS), as mandated by the State Board of Education. According to SCC COMPASS report (2013–2015), more than half of the first-year freshmen entering SCC were required to enroll in developmental courses (Table 2), which indicated that students were struggling academically and did not acquire the necessary college readiness skills. College leaders were unable to determine whether TS participants entering SCC were included in the number of student struggling academically. The phenomenon of students requiring developmental intervention is not localized to SCC.

Table 2

Comparison of First-Time, First-Year Students

Semester	% of SCC students tested into developmental courses	% of Alabama Community College System students testing into developmental courses
Fall 2011	67	62
Fall 2012	69	60
Fall 2013	70	60

Note. Alabama Community College System Transitional Studies Report (2014).

A national longitudinal study reported that a large percentage of students who enter community colleges are required to take at least one remedial course before enrolling in college-level courses (Cooper, 2011). According to ACT, Inc. (2011), college and career readiness means that a student will have the knowledge and skills to

enter postsecondary institutions and enroll in credit level classes without remediation. Researchers revealed that retention rates for students testing into developmental courses are more likely to drop out before the second year (Daisk, Dixon, & Talbert, 2012). Based on this research, underrepresented students attending SCC were arriving at a disadvantage. Table 2 shows the percentage of SCC first-time first-year students that test into developmental courses compared with other Alabama community colleges. SCC serves a large percentage of first-generation and low income students. This data further documents that more than half of this population attending SCC is not ready for college-level work. College leaders have not determined whether the 43% who tested out of developmental courses are TS participants.

Further data revealed that after 2010, the college was retaining less than 50% of first-year freshman (Table 2). Understanding the importance of early intervention and improving educational achievement for students was a concern for the college and many stakeholders; therefore, the college was beginning to question the effectiveness of the TS program. However, no research had been conducted to determine whether TS participants were entering SCC academically prepared or whether TS participants were successful after the first year. The retention rates for first-year freshman were below 50% (Integrated Postsecondary Education Data Systems [IPEDS], 2010; 2011, 2012). See Table 3.

Table 3

SCC Freshmen Retention Rates

	2010	2011	2012
Freshmen retention fall to fall	55%	44%	49%

The local TS director collected follow-up data only on college enrollment, but was unaware of the effect services had on college readiness or college performance (TS director, personal communication, November 10, 2015). The problem that I addressed in this study was that, despite the intervention by the local TS program to improve academic preparation and overall college success, limited data were available on the overall effectiveness of the TS program. The problem that I investigated in this study was the differences in first-year grade point average (FYGPA) and COMPASS writing and reading scores of TS participants and those who did not participate in the TS program.

Rationale

The following corroborating evidence of the identified problem was reported by the National Center for Higher Education Management System (NCHEMS, 2010):

- More than 63% of students in the United States enter college directly from high school.
- Fewer than 50% who attend two-year colleges will return for their sophomore year.
- Of those who attend 2-year colleges, only 29% will graduate after 3 years.

Data about the local high schools and the number of students entering postsecondary education are presented in Table 4.

Table 4

Number of TS Graduates Entering Postsecondary After High School

Target high schools seniors	Year of graduation	No. of graduating seniors	Postsecondary enrollment (%)
High School 1	2013–2014	95	64
High School 2	2013–2014	146	64
High School 3	2013–2014	58	59
High School 4	2013–2014	87	61
High School 5	2013–2014	29	62
High School 6	2013–2014	56	49

Note. Alabama Department of Education Report of School Districts & Use of Follow-Ups 2013–2014.

College readiness must begin before a student’s senior year in high school (Royster, Gross, & Hochbein, 2015). According to ACT, Inc. (2013a), academic achievement that students attain by eighth grade has a greater influence on college and career readiness by the time they graduate from high school than anything that happens academically in high school. The need for early supports to help facilitate the college success of underrepresented students provides additional rationale for TRIO programs in general and TS in particular.

The primary approach to improving college readiness is to provide the skills and ongoing support for students to leave high school academically prepared to be successful in postsecondary institutions (Roderick, Nagaoka, & Coca, 2009). Conley (2010) stressed that if intervention programs focused on skills that involved academic and

noncurricular issues, the success of underrepresented students should improve. This approach should decrease the number of students requiring remediation before beginning college-level courses and contribute to the overall academic success of students. For this reason, SCC administrators understood the importance of improved collegiate preparation and early intervention prior to enrolling in college. For this study, I looked at only reading and writing scores to determine whether students were ready for college-level courses without remediation. Math scores were not included in this study. Participants scoring in development math only are only exempt from taking college-level math; however, student required to take developmental reading and English are limited to the college-level course they can take. The purpose of this study was to investigate differences in FYGPA and COMPASS writing and reading scores of entering freshmen who participated in the TS program and attended SCC and high school students who attended SCC but did not participate in the TS program.

Definition of Terms

College readiness: A student's ability to enroll in credit-level courses without remediation (Conley, 2010).

Student success: The ability to complete college entry-level courses at a level of performance that is sufficient to continue to the next courses (Conley, 2014).

Educational Talent Search (TS) program: A federally funded TRIO program that provides educational support to first-generation, low-income, and unrepresented minority students. This program serves the largest population of TRIO students (Pitre & Pitre, 2009).

First-generation students: Students whose parents have not completed a college degree (USDOE, 2015).

Low-income: An individual whose family's taxable income did not exceed 150% of the poverty level. The poverty level amount is determined by using criteria of poverty established by the Bureau of the Census of the U.S. Census Bureau (2015).

Remediation: "A class or activity intended to meet the needs of students who initially do not have the skills, experience or orientation necessary to perform at a level that the institutions or instructors recognize as 'regular' for those students" (Grubb & Associates, 1999, p. 174).

Developmental courses: Courses designed to address skill deficiencies of academically underprepared students and prepare them for the rigor of college-level work (Columbia University, 2009).

First-year grade point average (FYGPA): the cumulative grade points earned by students in the first-year of college earned after high school graduation (ACT, Inc., 2013b).

Computer Adaptive Placement Assessment and Support System (COMPASS): Placement test developed to accurately place student in credit-level courses or developmental courses (ACT, 2011).

Significance of the Study

Transitioning from high school to college can be challenging and overwhelming for underrepresented students (Bir & Myric, 2015). Student success is beneficial to students, the college, and society. College success is so essential that the U.S. economy

is requiring a redefined role for education, largely because in “tomorrow's labor force, blue-and white-collar alike, are going to need to learn new skills to change jobs, occupations and even careers” (Conley, 2014, p. 13). During the 2009 state of the union address, President Obama called on every person to commit to his or her own education. President Obama committed to providing the support necessary to increase the number of college graduates in the United States and called for community colleges to increase their graduation rates by 50% by the year 2020 (Loertscher, 2010).

SCC and local community leaders and state officials understand that the success of students means economic progression for communities and nation. A college education provides many opportunities for underrepresented students. Earning a postsecondary education is well recognized and has implications for economic growth, equality, and social mobility and can lead to better wages and lifetime earnings, which lowers unemployment and poverty (Wu, 2014). Community colleges will play a vital role in turning the economy around (Blose, 2010). As a result of changing economic trends in the U.S. economy, high school graduates are encouraged to attend or return to college to fulfill their dreams and improve their skills for employment (Franks, 2012). Economic projections have driven the need for education beyond high school. According to Hein, Smerdon, Lebow, and Agus (2012), “63 percent of all jobs in the United States will require some postsecondary education, and 90 percent of new jobs in growing industries with high wages will require some postsecondary training . . .” (p. 2). Therefore, to prepare students for the demands of the world of work, retention rates, and overall college success must improve. The influence that the local TS program has on

college readiness and overall academic success of students attending SCC could lead to the implementation of additional precollege programs.

SCC's mission is to be responsive to the economic needs of the state and the region. As a result of these demands, community colleges in the United States have experienced an increase in enrollment for the past several years (Blose, 2010). For institutions such as SCC, which has open admission, an increase in college enrollment also means an increase in students who are underprepared to succeed in college (ACT, Inc., 2011; Loertscher, 2010). Raising the level of academic achievement for low-income, minority, and first-generation students will benefit all stakeholders as indicated. According to Johnson-Weeks and Superville (2014), this population is entering higher education underprepared, and few find the necessary support to be successful. Educators are challenged with finding innovative ways to prepare students for college.

Research Questions and Hypotheses

Students entering higher education institutions underprepared for academic success is a perennial problem (McCoy, 2011; Perna & Thomas, 2006; Stern, 2013). The number of students requiring remediation at the college-level continues to increase and far too many students are failing or leaving higher education institutions without meeting degree requirements. The federal government and national reform groups have funded intervention programs aimed at preparing students for higher education and improving their success. Therefore, it is important to investigate whether there is a difference in FYGPA, COMPASS test scores in writing and reading between TS participants and

nonparticipants who enroll in SCC. The research questions and hypotheses that guided this study were as follows:

RQ1. What is the difference in FYGPA between TS program participants and nonparticipants?

H_{10} : There is no significant difference in FYGPA between TS program participants and nonparticipants at SCC.

H_{1a} : There is a significant difference between FYGPA for TS program participants and nonparticipants at SCC.

RQ2. What is the difference in COMPASS writing scores between TS program participants and nonparticipants?

H_{10} : There is no significant difference between COMPASS test scores in writing for TS program participants and nonparticipants at SCC.

H_{1a} : There is a significant difference between COMPASS test results in writing for TS program and nonparticipants at SCC.

RQ 3. What is the difference in COMPASS reading scores between TS program participants and nonparticipants?

H_{20} : There is no significant difference between COMPASS test scores in reading for TS program participants and nonparticipants at SCC.

H_{2a} : There is a significant difference between COMPASS test scores in reading for TS program participants and nonparticipants at SCC.

Review of the Literature

There is much discussion in the literature about creating a smoother, more successful transition for students as they progress from one educational level to the next (Contreras, 2011; McGlynn, 2011; Pitre & Pitre, 2009). According to ACT (2013a), 86% of ACT tested graduates aspired to complete postsecondary education; however, many lacked the knowledge and skills needed to be successful, which is demonstrated in the need for remediation. The number of students entering college has been on the rise for several years; however, the graduation and retention rates remain primarily the same (Bound, Lovenheim, & Turner, 2009). Achievement gap is even more troubling for low-income, first-generation and minority students (Contreras, 2011; Jenkins, 2009; Venezia & Jaeger, 2013). Understanding factors that affect underrepresented students may lead to better success.

The research on college readiness, overall academic performance, and the influence of intervention programs on student success was used as the basis for this study. The search of educational databases included: SAGE, ERIC, ProQuest Central, Educational Research Complete, and Google Scholar. I reached the saturation of literature through searches of the following key terms: *college readiness*, *TRIO programs*, *intervention programs*, *remediation*, *college success*, *student success*, *low-income students*, and *first-generation students*. The literature review demonstrates the range of perspectives different theorists and studies have taken regarding college readiness, barriers to college readiness for first-generation and low-income students, college readiness at the secondary level, and increasing college readiness through specific

intervention programs. A synthesis of diverse perspectives may lead to recommendations to continue or improve student success at the collegiate level.

Theoretical Framework

Increasing the percentage of high graduates prepared for college and career has become the new national crisis in education (Royster et al., 2015). With the increase in the number of students failing to demonstrate college readiness skills, educators are searching for ways to prepare students for the next level. Higher education institutions are increasing the level of collaboration with secondary institutions to better align standards that will lead to more college ready students.

Intervention programs have been sought after to provide additional foundational support for helping high school students achieve success in college. According to Gandara and Bial (2001), “Intervention programs have long been considered critical approaches to raising student achievement in schools, as well as to provide guidance to students, as they progress through the education pipeline” (p. 500). Such programs have opened many opportunities for disadvantaged students by providing supplemental services to help students overcome academic and other barriers (Jenkins, 2009). Venezia and Jaeger (2013) discussed interventions and systematic approaches to improve college readiness by overcoming some of these barriers. Some of the interventions included focusing on noncurricular variables, such as peer influence, parental expectation, and conditions that encourage academic study. Jenkin (2009) argued precollege programs are designed to focus on academic enrichment, social skills development, college and campus awareness, and cultural activities. Pitre and Pitre (2009) added that precollege

programs, sometimes referred to as *intervention programs*, provide necessary supportive services to address barriers that would hinder high school students from attending college or failing in college. Researchers revealed that services provided by intervention programs have shown vital in helping students understand the demands of college and improving their academic performance (Pitre & Pitre, 2009; Venezia & Jaeger, 2013).

The conceptual framework for this study is based on Conley's (2007, 2010, 2014) four dimensions of college readiness. The four dimensions of college readiness are (a) key cognitive strategies, (b) content knowledge, (c) academic behaviors, and (d) college knowledge (Conley, 2007, 2010, 2014). This framework provides a pedagogical foundation for the implementation of the TS Program (Perna & Scott, 2006).

Conley (2010) discovered that the following key cognitive strategies are embedded in freshmen-level courses: problem formulation, research, interpretation, communication, and precision and accuracy. Perna and Scott (2006) reported, "The success of a well-prepared college student is built upon a foundation of key cognitive strategies that enable students to learn, retain, use, and apply content from a range of disciplines" (p.12). High school students have avoided some of the key cognitive strategies by relying heavily on memorization to pass tests; however, they have difficulty interpreting, communicating, and applying the information learned. Students lacking this cognitive strategy face academic challenges. Some areas of concern identified by Conley (2010) revealed that high school tests rarely expect students to "exhibit proficiency in higher form of cognition" (p. 31). Higher education faculty that was surveyed reported that entering freshmen needed further development in key cognitive strategies,

specifically in the areas of critical thinking and problems solving (Lundell, Higbee, & Hipp, 2005). High school students must arrive with the practical knowledge to engage in college search activities (Arnold, Lu, & Armstrong, 2012). Key cognitive strategies were identified as a mandatory skill needed for academic success.

The second key dimension to college readiness, content knowledge, also focuses on the academic skills necessary for college success. To successfully complete freshmen gateway courses, students should arrive with content knowledge in English, math, sciences, social studies, and the arts. Having previous content knowledge provides the foundation for college success. Achieve, Inc. (2011) published a study that surveyed recent high school graduates. The study results revealed that high school graduates did not feel prepared for college or the world of work. A substantial number of the students identified gaps in oral communication, English, mathematics, research, writing, and understanding complicated material. Students surveyed indicated that if they had fully understood the demands of college and the world of work, they would have worked harder. Gándara and Bial (2001) pointed out that many of the precollege programs can assist in this area by offering specific classes, seminars, or workshops to help students improve content knowledge.

A study conducted by Lam, Srivatsan, Mawasha, Vesalo, and Doverspike (2005) summarized the findings of a 10-year assessment of the pre-engineering program for underrepresented, low-income, and first-generation college students at the University of Akron. Students participated in the following precollege TRIO programs: Upward Bound Math Science, Educational Talent Search, and Pre-Engineering Academic

Achievement Programs, with the primary objective of increasing the number of underrepresented students in science, technology, engineering, and mathematics (STEM). The students were introduced to a full academic schedule that focused on cognitive strategies and content needed for entering college. The findings revealed that when promoting student engagement in a rigorous curriculum, students are more prepared for the demands of the college. According to the NCES (2010), underrepresented students are not cognizant of the coursework or content needed to be successful in college and are not placed in curriculums that will provide the necessary knowledge to be successful in college. Students must have core academic knowledge and skills to advance to upper-level courses. Understanding content is imperative for student success. Conley (2007) suggested that having academic knowledge, but lacking attention to the third dimension, academic behaviors, has caused problems for first-year college students. Freshmen are often confused about what courses are necessary to meet curriculum requirements, do not have time management or study skills required for college-level work, and do not know how to access necessary resources. Time management, study skills, prioritizing, and socializing are all important behaviors students need to achieve academic success (Conley, 2010).

Valencia (2010) reported that behavior, which includes lack of motivation that leads to poor academic outcome, is embedded in deficit ideology. According to Castro (2013), deficit ideology is a viewpoint that blames “students (or her family or culture) for lacking the appropriate skills and behaviors necessary for academic success rather than examining institutional norms and values” (p. 302). One study revealed that students

who enrolled in a personal growth college course that focused on social and academic integrations experienced an increase in persistence in higher education (Boylan, 2009). Conley (2007) reported that if students develop an understanding of what college has to offer and how to behave in college to gain the most benefits from the experience, they would be more likely to persist and graduate. According to Conley (2010), academic behaviors, which center on “student self-awareness, self-monitoring, and self-control” (p. 39), are important behaviors necessary for academic success.

The fourth and final essential dimension to college readiness is college knowledge, a construct that focuses on knowledge of college admission’s requirements, financial aid, and other information needed to successfully navigate the postsecondary system (Conley, 2010). Increasing college attendance, college awareness, and providing exposure to college are among the top four frequently addressed goals used by precollege programs. College completion was ranked least important for precollege programs (Perna, 2002). Jenkins (2009) indicated that underrepresented students rely on precollege programs to provide college knowledge. For many, attending college is a new culture, particularly for first-generation students. Questions about what college to attend, admission requirements, and the difference in high school and college may arise. These are all knowledge-based questions critical to student success (Conley, 2010). For many TRIO programs, college access and knowledge is the primary focus. Providing college trips, financial aid seminars, and assistance with college applications appear to be strengths of intervention programs.

Conley's (2010) dimensions of college readiness provide a baseline understanding of what it takes for high school students to succeed at the next educational level.

Conley's concept goes beyond academic preparation and identifies other important factors that are sometimes overlooked, such as behaviors, financial support, parental support, and overall college knowledge. Focusing on these factors has contributed to the overall academic success of students (Venezia & Jaeger, 2013). These dimensions presented by Conley provide the theoretical rationale for the use of the TS program to engage students and prepare them for higher education. Conley's theory provides the basis for related strategies that can be used by high schools and pre-college programs. Strategies to develop skills in these four areas should, therefore, be reflected in TS programs aimed at producing positive results in higher education for at-risk students.

Cognitive skills, content knowledge, behaviors, and knowledge about college can all lead to success for students. Perna (2002) discovered that only one-third of precollege programs that target underrepresented students in higher education track participants through college graduation. Many of the precollege programs primarily focus on college access. Gandara and Bial (2001) reported that few of the precollege programs evaluate activities or influence. Pitre and Pitre (2009) lauded TRIO programs for having a track record of making sure TRIO participants were college prepared by providing access and support. Jenkins (2009) also noted that TRIO programs that engage in the four dimensions of college readiness discussed by Conley (2010) have shown to help students successfully transition from high school to college. Today, success in college is dependent on a variety of skills, which include behaviors, attitudes, aspirations, and

knowledge (Conley, 2010). Through systematic instruction, the skills taught could lead to success in higher education. Conley's four dimensions provides the basis of what skills, knowledge and behaviors high school students should demonstrate to be ready for the next level.

While recognizing these key dimensions to college readiness can benefit all students, minorities, low-income and first-generation student stand to benefit the greatest. Despite the efforts by the federal government to improve academic preparation and college readiness, I could locate only limited data on the overall effectiveness of precollege programs on student success in higher education.

The local TS program embraces the four facets of college readiness discussed by Conley(2010)by documenting that complete services are provided in all four areas (Mitchell, 2010). Some of the services provided by the local TS program include math and science summer institute, academic support such as ACT and ACT COMPASS preparation, financial aid workshops, parenting enrichment classes, workshops focusing on self-esteem building and goal setting, and college field trips. The local TS program also provides study skills, self-esteem, and time management workshops; however, students do not understand the importance of such skills until they have failed. For this reason, freshman orientation and first-year experience courses are needed to focus on academic behaviors, especially for first-generation and low-income students.

The purpose of this study was to investigate differences in FYGPA and COMPASS writing and reading scores of entering freshmen who participated in the TS program and attended SCC and high school students who attended SCC but did not

participate in the TS program. In the past, college admission was based on standardized test scores, high school GPAs, and high school courses.

In this section, I expand the literature review and provide research in four areas that explain college readiness at different levels and factors that impede and improve overall college success. This review will provide a better understanding of the identified problem and the challenges faced by students entering higher education, especially the underrepresented population.

College Readiness

Although much has been learned about college readiness, determining what influences college readiness and how to define college readiness beyond secondary courses and standardized tests have been difficult. According to Atkinson and Geiser (2009), predicting student performance based on standardized measures remains limited and questionable and does not determine college readiness. Researchers (Cooper, 2011; Kirst, 2007) have argued that high school courses are not preparing students for the intellectual demands of college. According to ACT, Inc. (2011), the college readiness annual report revealed that only 25% of high school students that took the ACT in 2011 were college-ready on all four benchmarks. Barnes and Slate (2013) pointed out that a one-size-fits-all college readiness agenda by federal and state leaders to improve achievements at all levels has been ineffective and stifling. The one-size-fits-all model pushes students toward 4 year baccalaureate degrees without taking other options into consideration. Other options include occupational certificates, associate degrees, or 4-year bachelor's degrees (Barnes & Slate, 2013). For students to be college-ready, they

should have the opportunity to explore all options prior to leaving high school. Achieve, Inc. (2011) advocated that students would have more opportunities if they were required to meet the same curricular guidelines. However, requiring students to all meet the same curricular guidelines would overlook students' interest, abilities, and aptitudes. Conley (2010) suggested that regardless of students' aspiration, high school programs should be designed in such a way that students are prepared to pursue a 2-or 4-year degree and will likely be successful.

Helping underrepresented students reach success may require expanding the traditional definition of college readiness. Wu (2012) proposed a new way of viewing the complexity of college readiness. Accordingly, Bronfenbrenner (1994) advocated many environmental factors in which students engage in their everyday lives greatly affect college readiness. These include family, peers, school, extracurricular activities, teachers, classroom programs, and counselors. Bronfenbrenner (1994) suggested that positive development occurs when individuals encounter positive interactions in these settings. Bronfenbrenner also suggested that the students' entire experience determines their educational outlook and behavior. Therefore, effective college readiness preparation has to involve more than academic preparation and must also address issues and barriers that influence college readiness.

Barriers to College Readiness

First-generation and low-income students face many barriers to success in higher education, and the profile of first-generation students consists of certain characteristics that contribute to the difficulties in succeeding in college. Engberg and Allen (2011)

indicated one persistent social justice of the 21st century was “providing the opportunity for every American to pursue an education that could potentially unlock a life of reward and fulfillment” (p. 786). With the demand for educated workers, a college education is one of the proven ways to close the gap for first-generation and low-income students (Woosley & Shepler, 2011). According to Stebleton and Soria (2012), first-generation students tend to have lower graduation rates than non-first-generation students, are less likely to return after the first-year of college, enter postsecondary education with lower levels of academic preparation, and, because of family demands, tend not to be as academically prepared as their non-first-generation peers.

Woosley and Shepler (2011) listed three similar barriers for first-generation and low-income students that work against college success. These include: (a) lack of family support, (b) lack of confidence in their ability to do college work, and (c) lower social integration skills. Woosley and Shepler also emphasized the need for understanding the experiences and barriers of first-generation students to provide supportive services. A study conducted by Perna (2002) focused on 11 components that could help students overcome hurdles if addressed by intervention programs. Perna emphasized parental support and academic skill development. The results revealed that only 6% of the 204 precollege outreach programs included in this study dealt with critical components that improve student success. These components included, but were not limited to: (a) college attendance, (b) college awareness, (c) college tours, (d) academic skill development, (e) promoting rigorous course, (f) parental involvement, (g) parents college awareness and assistance with financial aid, (h) parent involvement with student

activities, (i) SAT and ACT Training, (j) tuition reimbursement or scholarship, and (k) early intervention by the eighth grade. The majority of pre-college programs primarily focused on college attendance. This study exposed the need for specialized services and support for first-generation and low-income students to overcome college readiness barriers.

Another barrier included lack of knowledge about college. College readiness involves having knowledge of the college-going culture (Hooker & Brand, 2010). Sparks (2010) revealed the importance of academic advising and parent and peer support in helping students make the choice of getting prepared for, attending, and succeeding through college. For low-income students, college knowledge is gained either from high school counselors or pre-college programs. Some of the barriers for low-income students are created by their educational environment. Despite the common core standards implemented in Alabama in 2010, McCoy (2011) indicated high school counselors' biases influence the kind of information and quantity of information about college given to low-income students. Students' perception of how they are viewed by high school counselors may influence whether they seek information about college from their counselors or attend college at all (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011).

Socioeconomic advantage carries over to education and creates barriers. According to Engberg and Allen (2011), 84% of students from families with an income more than \$100,000 entered college immediately after high school as opposed to only 40% of low-income students. The environment in which students engage can have a

negative or positive influence on educational outlook (Brendtro, 2006). Bronfenbrenner (1994) concluded, “Every child needs at least one adult who is irrationally crazy about him or her” (Brendtro, 2006, p. 166). Many low-income and first-generation students lack that supportive environment. According to Pitre and Pitre (2009), intervention programs like TRIO provide opportunities for underrepresented students that they probably would not traditionally receive. Campbell (2010) interviewed several TRIO alumni who completed a baccalaureate degree and made significant civic, community, or professional contributions. Many of the alumni indicated that TRIO programs gave them the opportunity to acquire the skills needed to be successful and overcome obvious barriers to college readiness. One of the participants suggested that he never thought beyond high school but one of the TRIO programs

helped him to see beyond his seemingly limited horizons and provided him with a renewed sense of self-confidence. In this protected environment, he was allowed to dream and to think out loud about what it might be like to continue his education and what he might be able to achieve. (Campbell, 2010, p.28)

A best practice of any TS program, therefore, would include the goal of building college efficacy and support.

According to Cates and Schaeffle (2011), even with precollege programs addressing barriers, a gap between students who are more or less likely to attend or be successful in college continues to exist. For this population, the achievement gap begins early in their academic career. Creating a college culture and exposing students to the

academic demands and requirements of college is one way of closing the gap. This exposure must begin early, ideally early in the secondary school experience.

College Readiness at the Secondary Level

Scholars questioned the seamless approach between U. S. educational systems because of the disconnect that exists between them (Adams, 2012, 2014; McCoy, 2011). This disconnect has led to inadequate academic preparation. The K-12 educational system in the United States has evolved and arrived at college readiness standards without communicating with higher education institutions (Wu, 2014). Ninety percent of jobs in growing industries will require some postsecondary training; however, business and industries have also questioned if traditional high school graduates are prepared for college or career (Hein et al., 2012).

Stern (2013) indicated the need for more collaboration between higher education and secondary education. To demonstrate the effect of collaboration, Stern recognized the successful partnership between Boone County schools and Northern Kentucky University to improve their math programs. Administrators at the high school indicated the need for every student to achieve at the mastery level. Stern added that preparing students requires dialog and transparency at each level. Paul Weeks, ACT Vice-President for Career and College Readiness, suggested that increased collaboration between secondary and postsecondary institutions would have increasingly positive results in the performance of high school graduates at the collegiate level (as cited in Stern, 2013).

ACT concluded that standards at the high school level must be aligned with higher education standards (McGlynn, 2013). Remediation standards are not clearly

communicated to secondary schools. Spence (2009), pointed out that “no state has succeeded in implementing a statewide college and career readiness initiative that fully involves the pre-K-12 public schools and public sectors of higher education” (p. 98). Haycock (2010) reported that misalignment of the curriculum at each level could present barriers to student success in higher education. Venzia and Jaeger (2013) added current changes in federal and state policies should attempt to reform how high schools provide opportunities for students to learn high-level content aligned with college and career expectations in a way that is integrated into the school day for all students, as opposed to programs for a small proportion of students. Students develop content knowledge at the secondary level, and if students miss the opportunity to gain basic knowledge at this level, learning high-level content becomes problematic. Higher education institutions must collaborate with secondary administrators to send a coordinated and clear signal about college standards that will lead to improved success for all students. Adams (2014) emphasized collaboration and the need to make early connections as keys to equipping students with the academic skills needed to be successful in college.

The second concern at the secondary level is limited access to knowledge about college and the requirements, which have led to the disparity for low-income, first-generation and minority students seeking a college education. Many underrepresented students are coming from low performing schools where students have limited access to counselors and other services. The low expectations set by teachers and counselors at the secondary level have often lead to underrepresented students not fully understanding college requirements (McCoy, 2011). According to McCoy (2011), counselors often

academically track the underrepresented populations to meet the minimum academic requirement for high school graduation. Although students and parents are given a choice about the availability of college readiness courses, particularly in high school, parents do not have enough information to make sound decisions about courses that need to be completed for success in college.

Researchers have shown that although education is more widely accessible, high school graduates are not necessarily ready for the rigor of higher education (Achieve, Inc., 2011; Haycock, 2010). Haycock (2010) and Kirst (2007) reported that more students are completing high school courses thinking that they are prepared for the rigor of higher education courses, and their intentions to attend college are very clear. However, the courses do not align with college standards; therefore, students are not academically prepared.

To improve the success of students, educational leaders and policy makers must encourage collaboration between both systems. Perhaps with more focus on curriculum alignment, early intervention, and early assistance with planning for postsecondary education, students will be more prepared for some level of higher education whether at the 2-year or 4-year level.

College Readiness through Intervention Programs

The Pew Research Center estimates that by 2050 approximately half (47%) of the U. S. population will be made up of individuals from ethnic backgrounds (29% Hispanics, 13% Blacks, and 9% Asians). The changing demographics in the United States will also change the demographics of higher education, which further demonstrate

the need for support from precollege or intervention programs. As noted, students from low income families, ethnic backgrounds, and first-generation students face many challenges upon entering college.

TRIO programs have placed particular interest on the multiple layers of context discussed by Perna and Scott (2006). The four multiple layers of content include (a) internal context (attitudes and behaviors); (b) family context; (c) school context; and (d) social, economic, and policy context. All four layers directly or indirectly influence the success of students. TRIO programs focus much of their attention on the four multiple layers by concentrating on building self-worth, encouraging parental involvement, exposing students to college choices, and providing data to support policy changes that affect student success. However, TRIO programs only serve 10% of the underrepresented population. Therefore, the need for additional precollege intervention programs is evident (Pitre & Pitre, 2009).

Perna (2006) concluded that no one perspective is adequate for understanding differences across groups. Berzin's (2010) study relied on multiple theoretical approaches to understanding educational aspirations among low-income youths. Berzin concluded that several conceptual frameworks and theoretical approaches added to the understanding of the factors related to aspirations. Some of the factors included "stronger academic environment, higher levels of parent-school behavior expectations, better academic performance, greater engagement in school, and higher levels of peer and parent support" (Berzin, 2010, p. 1). The goal of the TS program is to promote student success by preparing students for the overall experience of higher education. Despite

many efforts by the local TS program and other precollege programs to close the gap in education, gaps continue to exist in student success (Achieve, Inc., 2011; ACT, Inc., 2011; NCES, 2010).

Gándara's (2006) study supported the assertion that support services through intervention programs could play a critical role in the success of students in secondary education and as they transition to higher education. The study results provided clear recommendations to close the achievement gap. Some of the recommendations included earlier intervention, access to more rigorous curricula, transparent information for parents about the cost of college, and selecting counselors from the same background who can help parents understand the demands of higher education and translate those demands for their children (Gándara, 2006). Other researchers have concluded that intervention programs often provide a supportive environment outside of the classroom upon which underrepresented students rely heavily (Gándara & Bial, 2001; Gándara & Contreras, 2009).

In this section, I introduced a theoretical framework related to the problem and provided scholarly discourse from the literature to better understand the problem and justify its investigation through empirical inquiry. Researchers revealed that intervention programs can contribute to overall college success when the academic and nonacademic issues are addressed. My critical review of recent, peer-reviewed literature also set the problem in the larger field, while always interpreting for the local setting. My goal was to include diverse perspectives throughout my reading and synthesis of the literature related to college success for underrepresented students.

Implications

In this study, I aimed to expand the knowledge surrounding the factors that could improve the overall success of an underrepresented population in higher education when the TS program is used with similar populations. The research on the influence of TS programs on college readiness and academic performance in college is limited. Like the local TS program, many pre-college programs track students through high school graduation and college entrance, but few follow up on the influence the program has on college readiness or college performance. Through this study, I hope to begin to fill that gap (Gándara & Bial, 2001; Perna, 2002). I anticipated that this project study would go a step further than college access and determine if the TS program or other intervention programs have an influence on college readiness as determined by placement scores and overall college success as determined by FYGPA. The review of literature has helped me develop insights into the factors that influence college success for underrepresented populations. The project included with this study is a white paper that includes many of these insights from the literature (see Appendix A). Positive social change is pursued when increasing the success of underrepresented students narrows achievement gaps.

Summary

Intervention programs have been documented as a way to prepare students, particularly underrepresented students, for postsecondary education. However, according to Venezin and Jaeger (2013), programs like TS are unable to demonstrate their influence on academic achievement, specifically academic achievement in higher education. An extensive literature review revealed that for pre-intervention programs to be effective,

academics and nonacademic factors must be addressed, which include college knowledge, academic preparation, family dynamics, attitudes, and behaviors. The local TS program focuses on both academic and nonacademic factors through workshops, academic support, summer enrichment camps, and providing college knowledge; however, research has not been conducted to determine if the services provided influence college readiness or academic achievement. Section 2 includes the methodology and all the necessary components to determine the influence of the local TS program on college readiness and overall college success.

Section 2: The Methodology

Research Design and Approach

In this study, I examined whether participation in the TS program influenced college readiness, as determined by COMPASS scores in writing and reading, and college success, as determined by FYGPA, at SCC. The independent variable in this study was participation in the TS program with two levels, yes and no. I did not measure any particular length of time in the TS program. The dependent variable was the COMPASS placement scores in writing and reading and the FYGPA. Although an experimental design would have provided more substantial evidence for a causal relationship between variables, the independent variable occurred; therefore, this causal-comparative design was most appropriate to study the possible effects on an observed dependent variable (Avry, Jacobs, & Razavieh, 1990). The causal-comparative design addressed the influence of the TS program on student achievement at SCC by comparing TS program participant and nonparticipant students on three dependent variables. Section 2 provides information on research design, population and sample, instruments and related validity and reliability, data collection and analysis, data processing and storage, assumptions, limitations, scope, and delimitations of the study.

Setting and Sample

The study setting was SCC, a community college located in a rural district in central Alabama with enrollment ranging from 1,500 to 2,000 students each semester. The college is accredited to offer associate degrees in science, arts, applied science, and certificates in technical programs. The demographic makeup of the school is 68%

female, 32% male, 22% European American, 76% Black, 1% Hispanic, and 1% other. More than 80% of students attending SCC are classified as first-generation and low-income. Eighty-three percent of the students rely on federal funding to attend college.

I selected the research participants from the list of 2011, 2012, and 2013 TS program high school graduates who entered SCC the fall semester after graduation. Students who dropped out after the first semester were excluded from the study. Students entering SCC are required to take the COMPASS to determine first-year college courses and to identify students requiring remediation. During the admissions process, students are given the opportunity to present their ACT or SAT scores. Any student scoring 470 or above on the SAT Writing or 20 or above on the ACT English within 3 years of enrollment is exempt from the English assessment requirement and placed in college-level courses. The scores of students that were exempt from taking the COMPASS exam were excluded from the study because the college had no COMPASS scores; however, their FYPGAs were included in the data for all students.

As suggested by Creswell and Clark (2011), I selected the statistical power of .95 for this study to reject the null hypotheses at a significance level of .05. I conducted power analysis for a one-sample t test using the online G-POWER calculator to determine a sufficient sample size. Based on the aforementioned assumptions, the desired sample size is 52 per group (HyLown Consulting, 2016). Lodico, Spaulding, and Voegtle (2010) suggested that if the population is less than 200 and all records are available for the study, then the entire population should be sampled as a census. My census sample of 120 participants (60 in each group of TS and non-TS participants)

exceeded the required sample size suggested by the G-Power calculator. The sample size for COMPASS scores differed slightly. One hundred and seventeen participants' records were available with scores on the COMPASS writing DV, and 116 participants' records were available with scores on the COMPASS reading DV.

Instrumentation and Materials

Archival data from SCC school records (COMPASS scores and FYGPAs) were used as dependent variable measures of college readiness and academic success, respectively. The COMPASS scores were derived from the COMPASS instrument, which is a computer-adaptive college placement test that evaluates students' skills in reading, writing, and math. As a computer-adaptive assessment, the number of items presented depends on the number of correct and incorrect answers provided by the student (ACT, Inc., 2013b).

ACT, Inc. (2013b) provided a statement of validity for two of the main uses of COMPASS. According to ACT, Inc. (2013b), the COMPASS is valid for "(1) measuring entering college students' educational knowledge and skills and (2) assisting students and college officials in making course placement decisions" (p. 22). The writing skills test requires the student to analyze sentences and paragraphs and correct errors in essays in the areas of mechanics, including basic grammar, punctuation, and sentence structure. The test also assesses rhetorical skills, including strategy, organization, and style. The score for the writing scale is from 0 to 100, with 67 at SCC being the threshold for students to enroll in college-level English (101) and other first-year college courses such as biology, psychology, and social sciences.

The reading test is designed to evaluate a student's comprehension and vocabulary skills. Reading scores range from 0 to 100, with 65 the cutoff score. If the score is below 65, the student must successfully complete a remedial reading course before being allowed to take certain freshman level college courses.

For this study, I used the COMPASS writing and reading scores to compare students to determine whether there was a significant difference in SCC college readiness based on TS program participation. The ACT COMPASS test is a reliable and valid measure of writing, reading, and mathematics skills for measuring knowledge and skills and for course placement (ACT, Inc., 2013b). Multiple researchers (ACT, Inc., 2012; Sawyer, 2010; Westrick & Allen, 2014) have documented the validity of COMPASS for educational knowledge and course placement. Westrick and Allen (2014) evaluated the validity of using COMPASS for making placement decisions and identifying students who needed academic support. Westrick and Allen presented three types of validity evidence, including (a) statistical measure of relationships between scores and success in first-year courses, (b) the accuracy rates of the number of students placed into "standard courses (likely to succeed in the standard courses) or developmental courses (unlikely to succeed in the standard courses)" (p. 2), and (c) "intervention hit rates that measures the accuracy of identifying the students least likely to succeed in standard courses" (p. 2). This instrument was useful in predicting how the students performed and measured the students' knowledge. The COMPASS instrument is particularly important at SCC because it plays a vital role in the admissions criteria.

According to ACT, Inc. (2013b), COMPASS is an adaptive test that is designed to ensure that content validity is maintained both for test questions and the subject area of intended assessment. ACT uses placement validity indices generated from logistic regression models to determine the validity of placement effectiveness (ACT, Inc., 2013b). ACT defined the cutoff scores as “the minimum score for which a student has a 50% chance of success in an indicated course” (ACT, Inc., 2013b, p. 21). Tables 5 and 6 present cutoff scores from results summarized from colleges. The accuracy rates are the percentage of student correctly placed based on cutoff scores. The increase in accuracy rate is “the difference between the estimated accuracy rates with a college’s cutoff score and the estimated accuracy rate that would occur if no placement assessment had been used” (ACT, 2013, p. 21). Success is determined by completing the course with a B or higher grade or C or higher grade depending on the course or program grade requirement.

Table 5

COMPASS Cutoff Scores and Validity Statistics for Placement in First-year Courses in College (B or Higher Course Grade)

Course type	COMPASS test scored	No. of colleges	Cutoff score statistics		Validity statistics	
			Median cutoff score	% ready for course	Median accuracy rate	Median increase in accuracy rate
English						
Composition	Writing Skills	68	71	44	66	19
Composition	Reading	28	81	50	60	10

Note. ACT COMPASS Manual (2013b)

Table 6

COMPASS Cutoff Scores and Validity Statistics for Placement in First-year Courses in College (C or Higher Course Grade)

Course type	COMPASS test scored	No. of colleges	Cutoff score statistics		Validity statistics	
			Median cutoff score	% ready for course	Median accuracy rate	Median increase in accuracy rate
English						
Composition	Writing skills	39	29	83	67	2
Composition	Reading	12	55	90	67	2

Note. ACT COMPASS Manual (2013b)

COMPASS is an adaptive test that provides test security and prevents students from becoming overwhelmed by spending too much time on content that is difficult. One of the concerns with using adaptive test is measuring internal consistency reliability. According to ACT, Inc. (2013b), computing for internal consistency reliability will not apply to adaptive tests because of the different sets of test items given on the test. However, to use a conventional formula to test for internal consistency reliability, the formula was used on each test. I computed the average scores and used them for comparative purposes. ACT used standard error of measure (SEM) as the method for determining the reliability of the test instrument. Table 7 shows the reliability for the COMPASS test with ranges from .79 to .90.

Table 7

Reliability Scores for COMPASS Reading Placement, Reading Diagnostic, and Writing Skills Placement

COMPASS test	Standard length				Maximum length			
	Min.	Max.	Avg.	Reliability	Min.	Max.	Avg.	Reliability
Reading placement	10	21	22.1	.87	17	25	27.1	.90
Reading diagnostic								
Comprehension	9	22	13.6	.78	9	24	17.0	.82
Vocabulary	5	14	13.4	.79	5	18	17.2	.84
Writing skills Placement	23	27	24.5	.88	23	52	42.5	.90

FYGPA was the variable used in this study to compare TS and non-TS participants on academic success. In prediction studies, GPA is frequently used as one of the criterion measures of college success. Although GPA is not an instrument, York, Gibson, and Rankin (2015) indicated that GPA tops the list as the most used measure of academic success. Academic success is inclusive and can involve many facets; however, for this study I measured academic achievement by reviewing only the participant students' FYGPA.

Data Collection

After receiving approval from Walden University Institutional Review Board (IRB, 06-26-15-0269534) and the research site (SCC), I collected and reviewed archival data (demographic data, COMPASS scores, and FYGPA) from the Office of Institutional Research. The Director of Admission provided FYGPA and COMPASS scores and removed identifying data (name and social security number) prior to sharing the file.

Students were classified by numbers as either (1) TS participants or (2) non-TS participants by the TS Director and Director of Admission. I did not have contact with students and worked directly with SCC's Directors of Institutional Research and TS Director for accessing the data. Although not all of TS participants are low-income, I requested that the IR Director also run a query on TS participants and Non TS participants' financial aid status. There were no alarming differences; therefore, data collection proceeded in the following order:

1. Demographic data (race, gender, school district, and program of study).
2. COMPASS test scores (writing and reading).
3. FYGPA.

Data Analysis Results

Participants who entered SCC during 2011, 2012, and 2013 fall semesters were identified and relevant data were entered into the research data file as described above. The collected data were entered into the Statistical Package for the Social Sciences (SPSS) software for data analysis. The raw data set used in the data analyses is provided in Appendix B. As shown in the data analysis plan provided in Table 8, I chose the independent samples *t* test to evaluate all three null hypotheses.

Table 8

Variables and Statistical Techniques for Hypotheses 1-3

Hypothesis	IV	DV	DV scale	Statistical test
1	TS participation	First-year GPA	Interval	<i>t</i> test
2	TS participation	Writing test score	Interval	<i>t</i> test
3	TS participation	Reading test score	Interval	<i>t</i> test

The group descriptive statistics for the three dependent variables are presented in Table 9. Scores for both TS participants and nonparticipants were excluded from the writing and reading *t* test analyses because of their ACT scores. Students with an ACT score of 20 and above are exempt from taking the COMPASS placement exam.

Therefore, writing and reading scores were not available for those non-TS participants and TS participants. Descriptive statistics for FYGPA, COMPASS Writing and Reading (mean, standard deviation, and standard error of mean) for the TS and non-TS participants are displayed in Tables 10,11, and 12.

Table 9

Grouped Descriptive Statistics for the Three Dependent Variables

	<i>N</i>	Min	Max	Mean	<i>SD</i>
First-year GPA (FYGPA)	120	0	4.0	1.850	1.2259
COMPASS writing scores	117	4	99	58.69	25.509
COMPASS reading scores	116	39	97	69.88	14.499

Table 10

Descriptive Statistics for FYGPA Dependent Variable

FYGPA	<i>N</i>	Mean	<i>SD</i>	<i>SD</i> error mean
TS participants	60	1.890	1.1626	.1501
Non-TS participants	60	1.810	1.2948	.1672

Table 11

Descriptive Statistics for the Writing Variable

Writing	<i>N</i>	Mean	<i>SD</i>	<i>SD</i> error Mean
TS participants	59	62.4576	24.32	3.16
Non-TS Participants	58	54.1379	26.57	3.48

Table 12

Descriptive Statistics on the Reading Dependent Variable

Reading	<i>N</i>	Mean	<i>SD</i>	<i>SD</i> error mean
TS participants	58	70.6552	12.59010	1.65316
Non-TS participants	58	70.3276	13.38550	1.75760

Using an alpha level of 0.05, I calculated independent-samples t tests to answer the research questions. In order to run an independent t-test, six assumptions should be met: (1) dependent variable should be measured on a continuous scale, (2) independent variable should consist of two categorical, independent groups, and (3) independence of observations. For valid results using independent t-test, the assumptions were met. The

dependent variables were measured on a continuous scale (GPA and COMPASS scores). The independent variable consisted of two categorical, independent groups (TS participants and nonparticipant and there is no relationship between the group themselves. The participants in each group are different. Three additional procedures were followed to ensure the dependent variable data met the assumptions for running *t*-test. (Laerd Statistics, 2016). Other *t* test assumptions were (4) testing for outliers for the two groups, (5) normal distribution of criterion scores for both groups and (6) homogeneity of variance on the criterion score for both groups (Laerd Statistics, 2016).

The results from both the Shapiro-Wilks and the Kolmogorov-Smirnov will be presented. According to Laerd Statistics, the Shapiro-Wilks is more appropriate for smaller sample size; therefore, the Shapiro-Wilks will be used as the numerical means for testing normality. The findings for each research question will be addressed separately.

Research Question 1 Finding

The explore procedure in SPSS was used to create criterion data boxplots to evaluate for outliers. The boxplots were evaluated for outliers based on FYGPA scores that would fall plus or minus 1.5 the box lengths from either edge (Laerd Statistics, 2016). There were no outliers in the FYGPA data, as assessed by inspection of a boxplot for values greater than 1.5 box lengths from the edge of the box (see Figure 1).

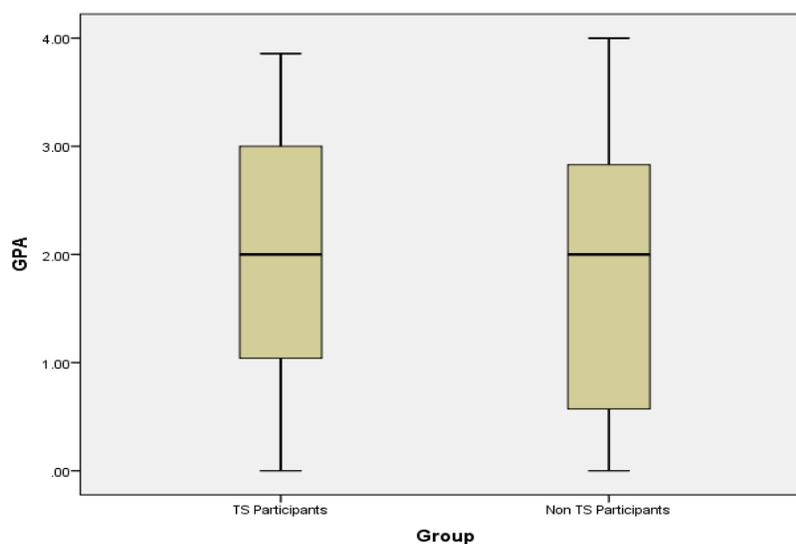


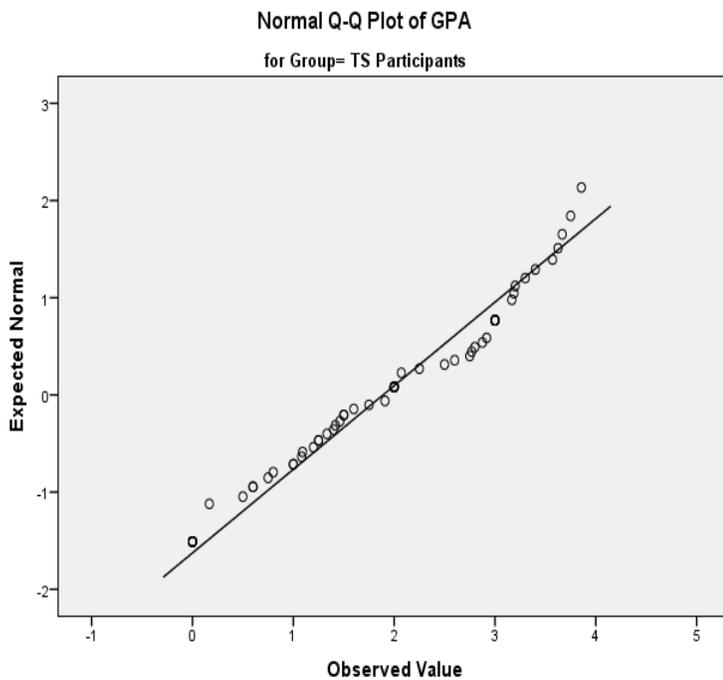
Figure 1. Boxplot evaluation for outliers among FYGPA for both groups.

To test the assumption of normality of the FYGPA data, the Shapiro-Wilks test was used (Laerd Statistics, 2016). From this test, the significance (p) was compared to the a priori alpha level of .05. As shown in Table 13, the significance level for both groups was less than .05, indicating that neither group was normally distributed based on the FYGPA criterion measure. As a result, normal Q-Q plots were consulted to further assess the normality assumption. As shown in Figures 2 and 3, the circular dots are positioned approximately along the diagonal line in the normal Q-Q plot for both the TS participants and non-TS participants. I concluded, therefore, that the FYGPA scores were basically normally distributed as assessed by visual inspection of the normal Q-Q plots, and I proceeded with the t -test of FYGPA.

Table 13

Tests of Normality for FYGPA Dependent Variable

Group	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
TS participants	.120	60	.031	.945	60	.010
Non-TS participants	.119	60	.034	.925	60	.001

*Figure 2.* Normal Q-Q plot of FYGPA for TS participants

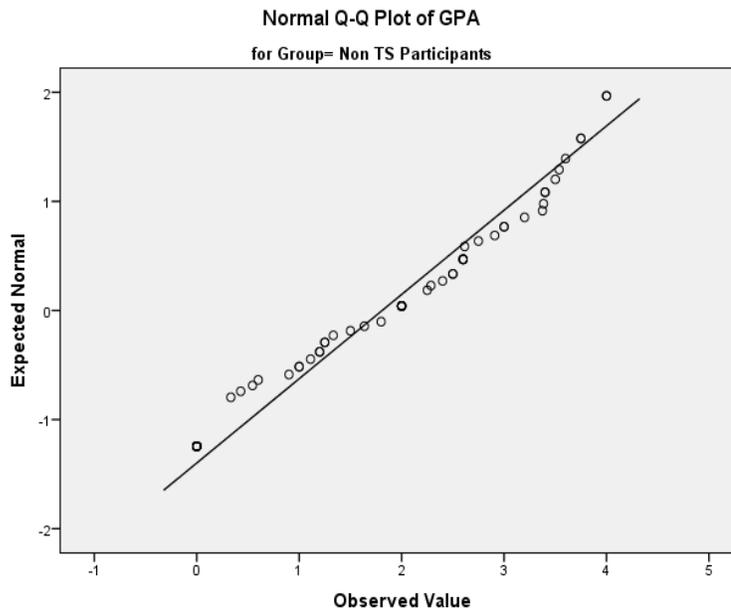


Figure 3. Normal Q-Q plot of FYGPA for non-TS participants

An independent sample t test was conducted to test for a significant difference in the mean FYGPA between the two groups (Table 14). There was homogeneity of variance on the writing scores for the TS and non-TS participants as assessed by Levene's test equality of variance ($p = .250$). The TS participant FYGPA was .080 (95% CI, -1.00 to 17.64) higher, but the difference was not statistically significant $t(118) = .358, p = .721$. The null hypothesis was not rejected.

Table 14

Independent Sample t-test for FYGPA Variable

Levene's test for equality of variance	<i>t</i> test for equality of means				Sig.	Mean Diff	Std. err. diff.	95% conf. interval of the difference	
	F	Sig	T	Df				Lower	Upper
Equal Variances Assumed	1.32	.252	.36	118	.080	.23	4.71	-36	.523
Equal Variances Not Assumed			.36	116.6	.080	.23	4.71	-36	.53

Research Question 2 Finding

The explore procedure in SPSS was used to create criterion data boxplots to evaluate for outliers. The boxplot was evaluated for outliers based on COMPASS writing scores that would fall plus or minus 1.5 the box lengths from either edge (Laerd Statistics, 2016). There were no outliers in the COMPASS writing scores, as assessed by inspection of a boxplot for values greater than 1.5 box lengths from either edge of the box (see Figure 4).

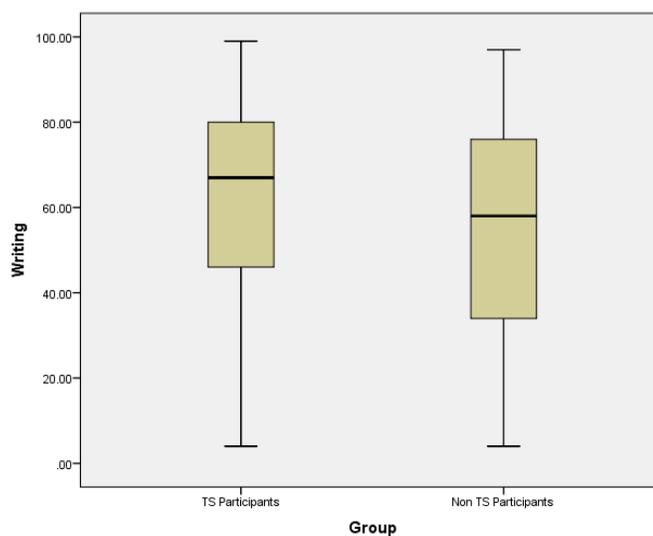


Figure 4. Boxplot evaluation for outliers among writing scores for both groups.

To test the assumption of normality of the COMPASS writing test data, the Shapiro-Wilks test was used (Lared Statistics, 2016). From this test, the significance was compared to the a priori alpha level of .05. As shown in Table 15, the significance level for both groups was less than .05, indicating that neither group was normally distributed based on the COMPASS writing scores. As a result, normal Q-Q plots were consulted to further assess the normality assumption. As shown in Figures 5 and 6, the circular dots are positioned approximately along the diagonal line in the normal Q-Q plot for both TS participants and non-TS participants. I concluded, therefore, that the COMPASS writing scores were approximately normally distributed as assessed by visual inspection of normal Q-Q plots, and I proceeded with the *t* test of COMPASS writing scores.

Table 15

Tests of Normality for Writing Dependent Variable

Group	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.	Statistic	<i>df</i>	Sig.
Writing 1	.152	58	.002	.950	59	.017
Writing 2	.155	58	.001	.935	58	.004

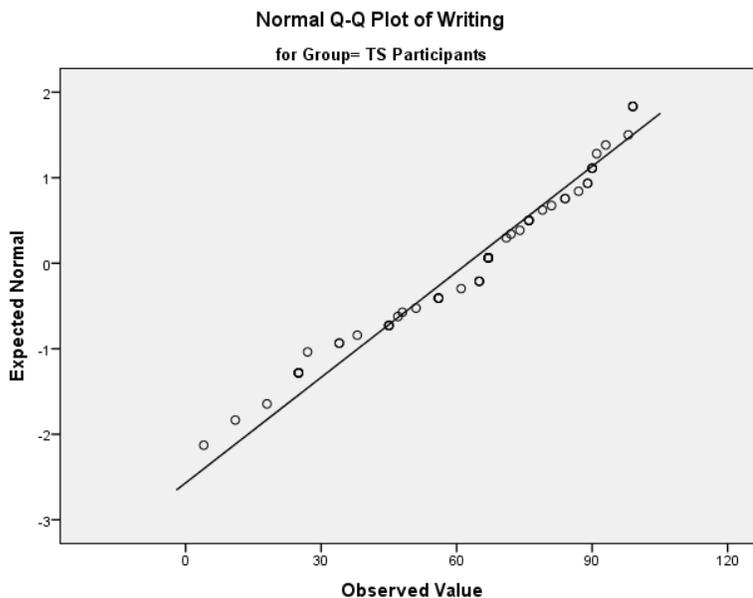


Figure 5. Normal Q-Q plot of writing scores for TS participants.

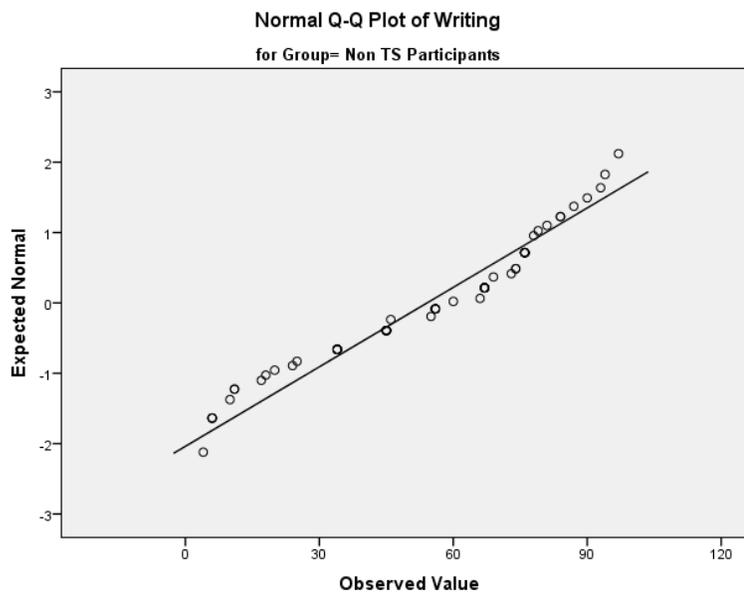


Figure 6. Normal Q-Q plot of writing scores for non-TS participants.

An independent sample t test was conducted to test for a significant difference in the mean writing scores between the two groups (Table 16). There was homogeneity of variance on the writing scores for the TS and non-TS participants as assessed by

Levene's test equality of variance ($p = .252$). The TS participant mean writing score was 8.32 (95% CI, -1.00 to 17.64) higher, but the difference was not statistically significant $t(115) = 1.76, p = .252$. The null hypothesis of no difference between the two groups on the COMPASS writing scores, therefore, was not rejected.

Table 16

Independent Samples Test for the Writing Variable

Levene's test for equality of variance	<i>t</i> test for equality of means				Sig. 2-tailed	Mean Diff	Std. err. diff.	95% conf. interval of the difference	
	F	Sig	T	Df				Lower	Upper
Equal variances Assumed	1.32	252	1.77	115	.080	8.32	4.71	-1.00	17.64
Equal variances Not assumed			1.77	113	.080	8.32	4.71	-1.01	17.65

Research Question 3 Finding

The explore procedure in SPSS was used to create criterion data boxplots to evaluate for outliers in the reading COMPASS test score data. The boxplots were evaluated for outliers based on COMPASS reading scores that would fall plus or minus 1.5 the box lengths from either edge (Laerd Statistics, 2016). There were no outliers in the COMPASS reading scores data, as assessed by inspection of a boxplot for values greater than 1.5 box lengths from the edge of the box (see Figure 7).

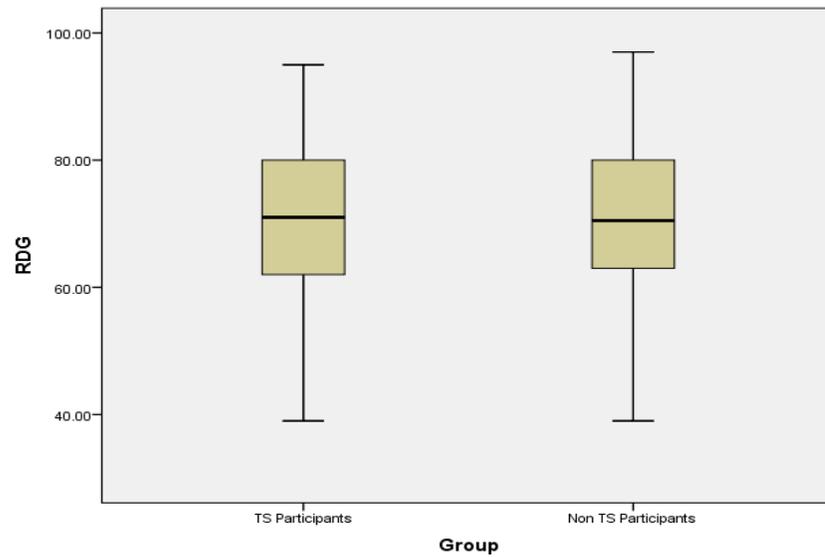


Figure 7. Boxplot evaluation for outliers among reading scores for both groups.

To test the assumption of normality, the Shapiro-Wilk test was used (Laerd Statistics, 2016). Table 17 presents the results from both the Shapiro-Wilks and the Kolmogorov-Smirnov. According to Lared Statistics, the Shapiro-Wilks is more appropriate for smaller sample size; therefore, the Shapiro-Wilks was used as the numerical means for testing normality. From this test, the significance (p) was compared to the a priori alpha level of .05. As shown in Table 18, the significance levels were greater than .05, ($p = .540$ and $p = .548$) indicating that both groups were normally distributed on the reading variable. The assumption of normality for the reading variable, therefore, was judged as met based on the Shapiro-Wilk test.

Table 17

Tests of Normality for the Reading Dependent Variable

Group	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.	Statistic	<i>df</i>	Sig.
TS participants	.091	58	.200*	.982	58	.540
Non-TS participants	.068	58	.200*	.982	58	.548

An independent sample *t* test was conducted to test for a significant difference in the mean reading scores between the two groups (Table 18). There was homogeneity of variance on the reading scores for the TS and non-TS participants as assessed by Levene's test equality of variance ($p = .872$). The TS participant mean reading score was .33 (95% CI, -4.45 to 5.11) higher, but the difference was not statistically significant $t(114) = .136, p = .892$. The null hypothesis, therefore, was not rejected.

Table 18

Independent Samples Test for Reading

	Levene's test for		<i>t</i> test for equality of means						
	equality of variances				Sig.	Mean	Std. err. diff.	95% conf. interval of the diff.	
	F	Sig	T	Df	2-tailed	Diff.		Lower	Upper
Equal variances assumed	.026	.872	.136	114	.892	.33	2.41	-4.45	5.11
Equal variances not assumed			.136	113.6	.892	.33	2.41	-4.45	5.11

Results

The results of the t test yielded no significant differences in FYGPA and COMPASS writing or reading scores for TS participants and students who did not participate in the TS program. This implies that the TS program had little to no influence on college readiness or college success as measured by COMPASS scores and FYGPA. Although the differences were not statistically significant, the research from the literature review is in favor of intervention programs to improve college readiness skills and overall success of the underrepresented population.

The theoretical framework of Conley (2010) supported by college readiness researchers (Achieve, Inc., 2011; ACT, Inc., 2012,; Byrd & McDonald, 2005; Cambell, 2010; Contreras, 2011; Sparks, 2010; Stern, 2013) provides evidence of the positive influence intervention programs can have on student success if academic and nonacademic concerns are addressed. Despite the inconclusive findings, several factors could have affected the results. Factors such as students with high ACT scores were exempt from the study and the commitment of staff to implement services effectively may have negatively affected the results. Additional research should be carried out before final conclusions are drawn on the influence of the TS program. Implementing best practice recommendations and enhancing services offered may lead to better success for TS participants.

Assumptions, Limitations, Scope, and Delimitations

Assumptions

The following assumptions were made:

- I assumed the groups were equal.
- The drop-out rate in both groups is similar.
- The sample in this study was representative of the population.
- The three criterion interval measures selected for comparison—FYGPA and the COMPASS test scores in reading and writing would be sound measures of student success.

Limitations

According to Lodico et al. (2010), researchers must be aware of the limitations and delimitations of their studies. The present study was limited to one small, rural community college in central Alabama. Students selected were from only one community college and therefore, results cannot be generalized to other community college populations. The socioeconomic status was reviewed for inconsistency, but not included in the analysis. The baseline data on socioeconomic status in both groups should have been equivalent and reported. Other factors, such as family dynamics, the extent of TS services provided, extenuating personal circumstances, and underlying forces within the school, also could have affected performance on the criterion measures and were not controlled for in the study design.

Scope

The scope of this study was TS participants attending a single, small community college. Other regional and state community colleges and 4-year colleges where TS participants attended were not taken into consideration. The focus of this study was the influence of the local TS program on students attending the local institution.

Delimitations

Delimitation factors adopted for this study include the choice of instruments used to measure the variables. The decision to use COMPASS scores and FYGPA and to determine overall academic success excludes many other factors that affect first-generation and low-income students.

Protection of Participants Rights and Ethical Considerations

Before beginning the research, I obtained approvals from the IRBs at both SCC and Walden University. The process of applying for and receiving approval from the IRBs was necessary to ensure ethical treatment of the participants. I completed the National Institute of Health's (NIH) online training program for the ethical treatment of human subjects in research. I did not have direct contact with the participants, and I took additional measures to ensure the anonymity of all participants. All names and other identifying data were removed from the file before it was given to me for analysis. Finally, I kept the physical data files that I used in a locked file. I keep the key to the locked file in a secured location. SCC has an offsite shredding company that destroys written and electronic records. The data will be destroyed after 5 years.

Conclusion

In this section, I discussed the study's design and presented the results showing any influence the TS participation had on FYGPA and COMPASS writing and reading scores compared to non-TS participants ($N = 120$). The research questions asked if there was a significant difference in FYGPA and COMPASS writing and reading scores of students who participated in the TS program and those who did not. Statistical analysis

did not show any significant difference at the alpha .05 level. Therefore, the null hypotheses for the three research questions were not rejected. While further study with a larger sample population may yield significant results, TS alumni attending SCC did not differ from non-TS participants in COMPASS scores or FYGPA.

Section 3 provides a rationale for the project genre, an explanation of the project, and a literature review that provides justification for recommendations on improving supportive services to an underrepresented population seeking to attend and be successful in higher education. Section 3 will also provide a detailed summary of recommendations for improvement.

Section 3: The Project

Introduction

Students entering college unprepared is an ongoing problem (Bir & Myric, 2015). Many colleges have implemented precollege intervention programs to assist with preparing students for the next level of education (Contreras, 2011). The college in this study enrolls a high percentage of first-generation, low-income, and minority students. The local TS program was implemented to provide support and to better prepare students with the necessary skills to be successful in college. The quantitative analysis in this study revealed that the TS program had no influence on participants' college success as measured by writing or reading COMPASS scores, or FYGPA. Although the local TS program showed little to no significant influence, other peer-reviewed studies have shown that precollege intervention programs can and do have a positive influence on students entering and completing college (Berzin, 2010; Contreras, 2011; Webberman, 2011).

After meeting SCC's TS director to discuss the results of my data analysis, I examined my literature review to develop best practice methods for improving the influence of the local TS program. The project resulting from this study, a white paper based on my findings and literature synthesis, will be presented to the SCC president and cabinet, local administrators, and TS staff. The subsections in this section include goals of the project, rationale, review of the literature, description, evaluation plan, and implications for positive social change. The white paper will inform the college's stakeholders of the findings and analysis on the influence of TS program on college

readiness and overall college success. The white paper will also include recommendations resulting from the literature review to assist the college in making decisions concerning the future of the TS program and the services provided therein. Therefore, the white paper is the natural project to accompany my study for the following reasons:

- The primary goal of a white paper is to share and disseminate a concise discussion of the research problem, results, and make recommendations for improvements (Kemp, 2005).

In light of no significant statistical findings and to affirm what the TS program is currently doing, suggestions from other intervention programs that have been successful are needed to illuminate best practices for improving the local TS program.

Description and Goals

According to Kemp (2005), the white paper provides a concise and authoritative report that educates readers about complicated issues. The format for the white paper includes the following: an introduction, description of the problem, my findings of the influence of the local TS program, recommendations, and conclusion (Appendix A). The report will also describe the methodology and data analysis techniques. Mattern (2013) indicated that white papers are tools used to educate readers or persuade them about complicated or technical information. I chose this project genre because although the findings indicated no significant influence of the TS program, through the white paper I can still provide literature-derived recommendations and additional information about

best practices for serving underrepresented students that will enhance services and lead to better results for the program and ultimately for the students served.

The college included in this study continues to enroll a population of students that face many barriers to succeeding in college. This problem is not uncommon to many higher education institutions; therefore, evidence-based decisions are vital to adequately serve this population. The goal of the white paper is to recommend a holistic approach to serving underachieving and underrepresented students in higher education. Kemp (2005) suggested that authors reach their audiences by assessing the need and providing direction on how to meet the need. I want readers to understand that all stakeholders must have a genuine concern for the development and achievement of students. The ultimate goal is to improve services to improve the success rate for students who comprise this population.

Rationale

According to Creswell and Clark (2011), researchers have a responsibility to report the results of their research studies, including the conclusions and implications that result from the findings. Practitioners rely heavily on such information to make educational decisions. Kemp (2005) proclaimed that a well-written white paper can and should influence its readers. Assisting in the solution process is the primary purpose of the white paper (Mattern, 2013).

The white paper project for this study (Appendix A) conveys the results of my study on the influence of the local TS program. Based on my reviews of the literature and experience, the white paper also offers recommendations to improve the overall

success of TS participants. Recommendations may include additional services, assessment of the influence current services provided, and training of the staff. Although the white paper is not the solution, I believe the recommendations may provide insight and direction for the college to work towards to implement improved strategies that would yield better results (Kemp, 2005; Mattern, 2013). The detailed report may affect change in how services are provided to underachieving and underrepresented students.

Review of the Literature

The literature review focused on ways to improve the local TS program. A number of factors may have influenced the results and, based on research, creating an environment that supports the needs of students is vital to the success of students (Byrd, 2015). As stakeholders invest more resources, they are asking for evidence of student success. According to Slager and Oaks (2013), better assessment of programs and services is needed. Webberman (2011) highlighted the importance of thinking like students to understand what is needed to help them succeed. I reviewed and analyzed more than 75 books, journal articles, and reports to documents strategies that I believe will improve the influence of the local TS program. According to Karp (2011), efforts to improve persistence should focus on processes, not programs. Karp emphasized participation alone did not improve outcomes. Although the TS program's primary focus is access, Engstrom and Tinto (2008) pointed out that access without support neither ensures success nor provides authentic opportunity for students.

Several databases and multiple sources provided information for this literature review. Online searches through Walden Library included ProQuest Central, ERIC,

EBSCOhost, Education Research Complete, and SAGE full-text databases. Search terms included *holistic approaches, professional development, intrusive counseling, coaching, collaboration between curricular and non-curricular program*. This literature review also focused on the format and content of the white paper, which served as the project genre for this study. The recommendation offered in this white paper resulted primarily from this review of the literature. Additional search terms included *white papers, grey literature, position paper, and document design*. Information on and examples of white papers were limited, and some were older than 5 years.

White Paper

The white paper written for this study addressed areas that could affect how services provided to low-income, first-generation, and minority students may lead to better results. White papers fall under the classification of grey literature or position papers (Willerton, 2012). Von Hendy (2014) provided a definition for “white paper” which indicated that all levels of paper that is government, academics, business, and industry, in print and electronic formats, not controlled by commercial publisher.” Grey literature is not published by commercial publishers but may prove as highly influential as any other traditional academic literature (Haddaway, Collins, Coughlin, & Kirk, 2015). Willerton (2012) indicated that grey literature white papers are documents to which people can relate and will likely resonate with readers. Grey literature has become an accepted model of unconventional communication.

The original intent of the white paper was to convey information on government reports and governmental policies (Willerton, 2012). Although the original intent is still

prevalent, the white paper has proven effective in providing valuable information. According to Gelfand and Anthony (2013), grey literature is gaining recognition in library collections because of emerging technologies. Grey literature had significantly increased in the title search of Google. The search for grey literature was greater than any other academic literature, particularly in the full-text results (Haddaway et al., 2015). Although Von Hendy (2014) indicated that grey literature will continue to be a major resource, the concern is that as the number of reports increase, the quality and reliability of the information will decrease.

Walsh (2011) provided information about the structure of a well-written white paper, which includes an introduction, background information, and recommendations and solutions. Walsh explained that the content of white papers is educational, insightful, and useful. Similarly, the purpose of the present white paper was to educate the SCC staff and persuade them to take a holistic approach to evaluating the TS program services and staff. The holistic approach includes various components. Based on the analysis of my project study, it was my responsibility to provide valid, informed, and relevant information about the problem and possible solutions.

Interconnection of Theory and Research

The white paper includes a thoroughly interconnected analysis of how theory and research support the recommendations for this project. The foundation of the white paper for this project included research on implementing a holistic approach, which involves advising through intrusive counseling and coaching, professional development, and improved collaboration. These foundations are discussed in the subsections that follow.

Holistic approach. For decades, the ability to retain and graduate underachieving, underrepresented students has been a challenge because of the many barriers faced by this population that have not been addressed (Bettinger, Boatman, & Long, 2013). The results of studies have indicated that nonacademic concerns must be addressed for students to reach their full potential academically (Bettinger & Baker, 2011; Li, 2012). A wealth of research exists on factors that influence college readiness among this underrepresented population in higher education (Contreras, 2011; Dennis & Osterholt, 2011; Garcia & Paz, 2009). However, a fundamentally different approach must be taken on how to understand and serve low-income, first-generation, and minority students.

Using a holistic and collaborative approach has proven to be an effective approach to addressing student challenges (Dennis & Osterholt, 2011). This approach involves both staff and support staff at the secondary and postsecondary level understanding common barriers and together meeting the needs of the learner (Dennis & Osterholt, 2011). The holistic approach also involves staff being committed to the success of students, which is the primary mission of pre-college and intervention programs. Student success involves much more than attaining academic skills (Conley, 2010). A holistic approach addresses every aspect of the student's environment that enables the student to reach his full potential (Mahmoudi, Jafari, Nasrabadi, & Liaghatdar, 2012). The holistic approach challenges a system that focuses on academics alone but believes that students should be viewed as a whole. Webberman (2011) added, "The more educators work together and look at the whole student, the better the students

will be served” (p.20). Factors (finance, academic, social, etc.) that have the potential to delay a student’s progress are addressed in holistic approaches. The holistic approach involves assessing needs, determining the best resources, and providing continued support (Honken & Ralston, 2013).

Intrusive counseling and coaching. TS Counselors are responsible for serving more than 900 students at the local middle and high schools. Approximately 150 students are either in the 11th or 12th grade. Counselors provide group sessions once a month for middle and high school students (Mitchell, 2010). In the secondary schools served by the TS program, preparing the underrepresented students remains a challenge because of the nonacademic concerns. Underrepresented students face many difficulties, such as lower aspiration to attend college, families with little to no education experience beyond high school, limited finance, destructive peer support, and adverse environments (Welton & Martinez, 2014). These factors create barriers for students as they transition from high school to college. A growing trend in the academic culture to address both academic and nonacademic barriers is academic coaching. According to Webberman (2011), academic coaching fosters a climate that will help students address concerns in all areas of life. Webberman pointed out that academic coaching is about making emotional connections and encouraging ongoing support to help students produce positive results in their lives.

Byrd (2015) noted the positive influence coaching had on their high school students. She indicated students enjoyed the individual attention and gained confidence as a result of the coaching program that led to their academic success. SCC participated

in one of the largest coaching programs with Inside Track. SCC has empirical evidence that coaching has increased achievement and retention rates for at-risk students at SCC (director of success coaching, SCC, personal communication, March 9, 2016).

According to Bettinger and Baker (2011), students coached through InsideTrack were more likely to remain in college and more likely to graduate than those who did not receive coaching.

Recognizing that many of the students lack social or academic skills needed for college, the TS program could incorporate academic coaching and intrusive counseling for the 11th and 12th graders. Researchers showed early intervention and support is vital to ensuring their success at the college-level (Adams, 2014). According to the International Coach Federation (ICF, 2016), the coaching concept started in athletic programs but has evolved over a period of time (Sweet, Dezarn, & Belluscio, 2011). Sweet et al. (2011) defined academic coaching as “a coaching style relationship to enhance student learning” (p. 79). Academic coaching for the TS program can begin with the assumption that early intervention that focuses on both personal and academic goals could improve student preparedness for college.

Academic coaching and intrusive counseling emphasizes accountability for both students and teachers. Counselors must initiate and cultivate relationships with students and high school teachers to focus on academic concerns and other nonacademic issues (Hartman, 2013). Hartman revealed that gaining entry into the classroom can be met with resistance. However, TS staff will have to demonstrate to students and teachers that the more successful students are in school; the more likely they are to graduate on time.

Tinto (1999) asserted that student retention improves as student learning improves. Therefore, the involvement of all stakeholders (parents, teachers, and students) is vital. This kind of coaching relationship involves providing feedback and support to improve students' success (Sweet et al., 2011). As Li (2012) noted, creating a learning environment is more than changing the climate at school or home; a learning environment nurtures the student confidence for achieving success. Establishing such an environment through student coaching can build self-esteem, confidence, and persistence. Students are more likely to ask for help with subject matter than they are to seek guidance with nonacademic matters; therefore, this coaching component aims at creating a supportive learning environment where students are comfortable seeking help in all areas. Li added when personal factors are addressed and students have continued support, students are encouraged to pursue learning despite difficulties. To provide effective support, staff must be trained with the necessary skills.

Professional and staff development. Professional and staff development may serve as a catalyst for improving services to TS students. Staff development can improve the effectiveness of staff members by providing focused professional development. To improve services to students, there must be an intentional effort to improve the outcome and effectiveness of the organization (Barham & Winston, 2006).

To engage students in intrusive coaching and counseling as recommended, TS counselors must have the necessary skills and tools needed to affect students. Professional development should be an avenue for advisors to understand the differences, challenges, and opportunities that first-generation, low-income and minority students face

to meet and address the needs (Rodgers, Blunt, & Tribble, 2014). Focused staff development will also serve three additional functions: to bring awareness of the needs of the underrepresented population, enhance the quality services provide to this population, and enhance student achievement (Generation Ready, 2013). Elias (2009) shared areas of importance that can help at-risk students achieve academically. Two of the areas should be the focus of additional training for TS staff: understanding the importance of building caring relationships and helping students set reachable goals by creating realistic pathways to reach their goals.

Building caring relationship serves as a primary need for the underrepresented population (Elias, 2009). Coaching training will help develop the necessary tools to build meaningful relationships. Porumbu (2014) pointed out keys aspects of training must be addressed for all coaches: self-competence, social competence, and professional competence. Porumbu believed “coaching refers to the process and not the content” (p. 340). The framework of coaching training focuses primarily on building relationships rather than finding quick solutions. Porumbu (2014) added that through training, coaches learn the benefits of coaching, which include:

- (a) support to discover what’s best in you, (b) access to your potential and your own creativity (c) successfully overcoming crisis situations, (d) overcoming the obstacles that prevent you from achieving your goals, (e) increased self-competence, and (f) create the necessary inner state for optimum performance.

(p. 341)

Training programs provide the background in coaching followed by extensive practice in coaching before receiving certification. According to Webberman (2011), training provides advisors with the necessary skills to make emotional connections, gain knowledge through asking powerful questions, and the ability to create a sense of order in the lives of students. Unlike academic advising, trained coaches guide student academically, emotionally, and socially through the education pipeline. A good coach-training program certifies 11 competencies through ICF. Coaching competencies covered during ICF-endorsed training includes (a) Meeting Ethical Guidelines and Professional Standards, (b) Establishing the Coaching, Agreement, (c) Establishing Trust and Intimacy with the Client, (d) Coaching Presence, (e) Active Listening, (f) Powerful Questioning, (g) Direct Communication, (h) Creating Awareness, (i) Designing Actions, (j) Planning and Goal Setting, and (k) Managing Progress and Accountability. Training could run from 4-18 weeks depending on the desired level of training and certification (ICF, 2016).

For students to feel comfortable communicating their frustration about academic and nonacademic concerns in and out of school there must be trust. Gold, Edmunds, Maluk, and Reuman-Moore (2011) pointed out the findings from one study that revealed students left school because they felt no one cared, no one had time, and no one knew them personally. Through staff development and training, TS staff can learn the importance of building caring, personalized relationships with students to encourage them to remain in school and work towards achieving academic goals. Kearney, McIntosh, Perry, Dockett, and Clayton (2014) emphasized that one of the key factors to

improve educational outcomes for all students was the development of relationships, especially for children that do not have strong relationships outside of their educational setting. Elias (2009) indicated only after building a relationship with students will advisors have the platform to discuss concerns and assist students in setting realistic goals.

Underrepresented students often set unrealistic goals based on media portrayals and mass culture (Elias, 2009). It is important to assist students in setting specific, clearly defined goals. Through staff development, TS advisors can help students with a step-by-step action plan to reach goals. Goal setting is about setting priorities which place students in charge of their learning and ultimately their lives (Newman, 2012). Too many high school students leave high school with limited goals and no direction. Early career assessment that focuses on interest and abilities will help students set realistic goals in choosing a college major and eventually a career. According to Robinson (2012), institutions of higher learning must stress interdisciplinary collaboration efforts both internally and externally to develop initiatives that address the diverse needs of students that create barriers to academic success.

Improved collaboration. Collaboration can be the key to overcoming challenges, improving an overall educational environment, and addressing diverse student needs (Poulos, Culberston, Piazza, & D'Entremont, 2014). Improved collaboration involves coordination and cooperation among all parties. Although all three work towards a shared goal, they differ significantly. Collaboration can be defined as two or more groups coming together to meet a shared goal that may not otherwise be

accomplished (James, 2014). The lack of collaboration between K-12 and higher education has created barriers to success for many students, especially in the areas of college readiness and completion (Rippner, 2015). Students' graduating from high school college-ready is in the best interest of both K-12 and higher education. For many states, the amount of resources spent on remediation can be allocated to another educational initiative that will give students an opportunity to participate in programs that will prepare them for college. Stakeholders are relying on both sectors to address barriers that contribute to this lack of collaboration.

Rippner (2015) revealed several barriers to interagency collaboration identified by. The barriers included political barriers, leadership barriers, legal barriers, mission barriers, resources barriers, and bureaucratic barriers. Each of these barriers must be addressed for there to be real collaboration between two sectors. Both K-12 and higher education institutions have overarching educational goals that can be addressed through improved collaboration. Using creativity, collaboration can begin at the local level. Because the local TS program is housed on the college campus but serves students in K-12, this can serve as the catalyst to bring both sectors together at the local level to discuss strategies that will address college readiness.

The summer bridge program conducted by the TS program was designed to prepare students academically for the next grade level and ultimately for the rigors of college-level coursework. Secondary teachers teach all summer classes in the areas of English, math, and science. The summer program staff could benefit from collaborating with college faculty on college level standards. Haycock (2010) discussed the

importance of curriculum alignment in preparing students for college. Rarely do college instructors and secondary instructors discuss content alignment that could lead to college readiness (Conley, 2010). Adams (2014) supported the collaboration between K-12 faculty and college but reported that many administrators at both levels acknowledge they are not collaborating effectively. Engaging college faculty in designing the summer bridge curriculum would provide clear signals about what students should know before entering college (Achieve, Inc., 2011). The TS summer programs accept student in grades six through 12. Adams (2014) indicated creating a seamless, personalized system involves blending the standards sooner than later. Improving the connection between high school and college courses could lead to better student performance.

These initiatives must be creative and cost-effective. The transition from high school to college can be overwhelming for students underrepresented in higher education. Intervention programs have been known to provide the supportive environment to strengthen the bridge from high school to college; however, according to Contreras (2011), their effects end when the program service delivery ends. The TS program provides little to no follow-up with alumni once they enter college, which creates a barrier because underrepresented students rely heavily on the continued support (TS director, personal communication, November 10, 2015).

Student Support Services (SSS) is an intervention program at SCC that also serves first-generation, low-income, and minority students. Collaboration between the TS program and SSS program would likely help achieve the greatest level of success for students as they transition. Access to an ongoing supportive environment that provides

similar support is likely to influence students to remain in college. The SSS program provides tutoring, advising, personal counseling, scholarships, workshops, and ongoing support. The SSS program has four primary goals: to retain, to graduate, to transfer, and to foster an institutional climate supportive of first-generation and low-income students. This program encourages a strong sense of community among students and SSS staff (director, personal communication, January 7, 2016). Connecting TS alumni with the SSS program can provide a network in which student can rely on for support. Both programs share overarching program outcomes, which is to raise student achievement while providing support through the education pipeline.

Data revealed the number of students transitioning to college immediately after high school is much lower among minority students. Those who transition immediately after high school encounter challenges to persistence (Contreras, 2011). The partnership between TS and SSS also exposes students to peers with similar goals and aspirations. Contreras indicated this environment would likely influence students positively. According to Engstrom and Tinto (2008), when students are placed in a supportive learning environment, they feel “less alone and more confident of their ability to succeed in college” (p. 48). Effective collaboration will promote an easier transition for low-income, first-generation, and minority students and provide supportive services to help students excel academically.

Project Description

Potential Resources and Existing Supports

The implementation and delivery of the white paper require no additional resources. The SCC president has verbally committed to supporting this research project and is receptive to the recommendations (SCC president, personal communication, December 17, 2015). The president has indicated that results and recommendations should be available to all TS staff, president's cabinet, and Office of Institutional Effectiveness. Researched literature provided the framework for all recommendations included in the white paper.

Potential Barriers

The potential barrier of the project may be the resistance of TS staff to implement the recommendations. Although the president fully supports the recommendations and has agreed to require implementation, buy-in from the TS director and TS staff is important. First, staff must have a clear understanding of the results and research on possible solutions. Second, staff must understand that quality training will be provided. Finally, TS staff should know that the white paper recommendations may lead to better student achievement, which is the primary goal of the program.

Proposal for Implementation and Timetable

The implementation, including training, will begin as soon as possible after the completion of this study. Implementing the coaching component and other recommendations is scheduled to begin fall 2017 semester. According to SCC's president, the college has a trained coaching coordinator who is certified through ICF and

can provide training to the TS staff immediately (SCC president, personal communication, January 7, 2016). Peer reviewed articles supporting and guiding the development of the recommendations are included in the white paper.

Roles and Responsibilities of Students and Others

The recommendations will require the support of selected faculty and the Student Support Services Department. The selected faculty will work closely with the TS staff on developing a curriculum for the summer bridge program. TS staff will collaborate with SSS staff to ensure continuous support for TS graduates. Students were not involved and have no direct responsibility for implementation.

Project Evaluation Plan

Summative and formative evaluation will be conducted to provide useful feedback for decisions. Formative evaluation assesses the implementation and evaluates the development of a program to strengthen and improve the program's intended outcomes (McDavid & Hawthorn, 2006). This evaluation was chosen to provide ongoing feedback for program modification and feedback to the stakeholders about the implementation of the recommendations. Providing this information will help SCC administrators better understand why the COMPASS scores and FYGPA of TS participants and non-TS participants did not differ despite the implementation of TS services. A survey will be conducted via the website (Survey Monkey) where staff will be asked to give feedback on the overall professional development training. The ranking scale will be a 5-point, Likert-scaled (see Appendix A). The evaluation will be to track staff development skills and knowledge and make informed decisions about further

training. Services will also be evaluated by participants (see Appendix A) to understand their development and knowledge and skills obtained as a result of services provided. This feedback will also help staff strengthen and improve services. Descriptive statistics will be used to analyze results to determine if the training is effective or should be changed. Feedback will be shared with SCC administrators.

Formative evaluation is essential in producing a corrective action plan to address issues as they occur (Yi, 2012). The white paper includes recommendations that can be implemented immediately. The overall goal was to provide recommendations that may improve the outcomes of TS alumni. Conducting a formative evaluation requires ongoing assessment to determine what works, what does not work, and why. According to Beyer (1995), formative evaluation should be ongoing, involve assessment, and seek accurate information for feedback and improvement.

Formative evaluation was selected for this project for two reasons. First, it was important to have the flexibility of requiring ongoing assessments to make needed changes. Formative evaluation provides for opportunity for modification for continuous improvement. Summative evaluation, although useful, does not lend itself to flexibility because usually the assessment occurs at the end of the implementation phase. Secondly, with limited resources, it was the most cost-effective way of assessing intended outcomes. Beyer (1995) noted that formative evaluation is a useful and cost-effective way to determine the effectiveness of a program.

The key stakeholders will be the president and cabinet, TS director, TS advisors, and students. Seeking evaluative advice from key stakeholders during the development

stage is vital (Beyer, 1995). The feedback from stakeholders and students will help avoid continuing with ineffective activities and provide feedback about service that has caused an immediate positive effect. Formative evaluation allows the evaluator to evaluate activities while they are occurring so that intervention can take place immediately to improve the interventions (Yi, 2012). The goal is to improve college readiness skills for TS participants and alumni.

Summative evaluation will be used to determine whether the program has achieved intended outcomes (Beyer, 1995). The intended outcome is to increase college readiness and overall success among TS participants by decreasing the number of participants enrolling in developmental courses at SCC and increasing the number of TS participants successfully completing the first year of college at SCC in good academic standing. Each year the evaluator will collect the same dependent variable data (COMPASS reading and writing scores and FYGPA) and apply the same *t* test analyses to see if the program is beginning to achieve the intended outcome. The ongoing assessment of services could provide the necessary feedback to staff on the influence of the program.

Periodic evaluations of services should include the defining and measuring of outcomes to demonstrate that services are contributing to student development or student learning (Slager & Oaks, 2013). According to Slager and Oaks (2013), “assessment goes beyond accountability for student learning; it helps demonstrate the worth of services and programs” (p 25). Byrd (2015) noted that to track the effectiveness of a program, students’ progress must be monitored. The purpose of assessment is to demonstrate a

commitment for improvement. Assessment will involve a “combination of quantitative and qualitative inquiry, direct and indirect methods of measurements, and formative and summative means of evaluation” (Powers, Carlstrom, & Hughey, 2014). TS provide a variety of services to develop students and prepare them for college. The TS program will benefit from having activity goals and objectives in place for assessing the influence on student learning and development.

Project Implications

Local Community

The white paper resulting from this study addresses concerns of SCC administrators and offers recommendations for improvements. Improving college readiness skills is vital to the success of all stakeholders at every level (local, state, and national). The recommendations could improve student’s college placement scores, thus helping local students avoid taking courses that will not count towards degree requirements. Students taking remedial courses are more likely to drop out of college before their second year (Bettinger et al., 2013). These recommendations in conjunction with other interventions could lead to better academic performance. As a result, social change should occur from not just an increase in college attendance, but also an increase in graduation and retention rates. As previously noted, only 21% in the service area hold a bachelor’s degree. The community will benefit by having an educated applicant pool to fill job openings and to recruit better jobs to the community.

Far Reaching

Positive social change occurs when people begin to share and implement ideas that have a proven record of accomplishment. Local, state, and national education departments are seeking ways to improve college readiness skills and to increase the college success of students, particularly for low-income, first-generation, and minority students. The content and recommendations included in this study's project could lead students to successfully earning educational credentials and a better life. Low rates of college completion have been a concern for American higher education (NCES, 2010). The low rate, in many cases, has been the result of students enrolling unprepared or nonacademic issues that result in withdrawal or failure. Intervention programs could be the bridge that closes the gap. Recommendations included could lead to an increase in the use of resources for stronger supportive services for students and professional development for counselors and teachers.

Conclusion

Section 3 included the scholarly justification for developing a white paper for this project study and a literature review relevant to developing a white paper to improve student success for underprepared students in higher education. I also included the goals, for and development of the project, which is contained in its entirety in Appendix A. I also discussed the project evaluation concept and implications for social change.

Section 4 contains my reflection on the project's strength and limitation in addressing the problem. In this section I summarize recommendations and address the

problem from a different perspective. Section 4 also includes my reflections about my acquired knowledge and scholarship, project development, evaluation, leadership, and change. I discuss the challenge, growth, and depth of learning that I experienced as a scholar, practitioner, and project developer. Finally, I also reflect on the challenges I faced as a result of my own person-centered change.

Section 4: Reflections and Conclusions

The purpose of the quantitative study was to determine the influence the TS program had on college readiness and overall college success. My findings revealed that there was no significant relationship between participation in the current TS program and college readiness as measured by COMPASS scores in writing and reading, or between TS program participation and FYGPA. My findings, however, were incongruent with the extant literature that documents positive influences of TS and other TRIO programs in other colleges and universities. My findings could be faulty owing to a small sample size ($N = 120$) or the TS program at SCC may be more or less effective owing to conditions that were not examined in this study. For example, I did not examine the experiences of the program participants to ascertain their beliefs or attitudes about their TS program experiences. To reconcile my findings with the literature, I penned a white paper for SCC's leadership that both summarize my findings and TS program best practices that I derived from the literature (Appendix A).

This concluding section will provide reflections of the project study and my development as a scholar. I will discuss strengths and limitations of the project and my recommendation for improvement. My passions for connecting with and then increasing the success of underrepresented students in higher education fuels my desire to understand factors that promote success among this group. I will reflect on what I have learned about scholarship, research, project development, and leadership. Finally, I will discuss implications for future research and positive social change.

Project Strengths and Limitations

I recommended changes to services in the form of a white paper as a result of this study. If the project activities are carried out effectively, the intended result will be an increase in the number of students testing out of developmental courses and successfully completing their first year of college. SCC is a 2-year college that prepares students for transfer to 4-year universities and for meaningful, productive work. Therefore, the most important desired outcome is an increase in graduation rates of TS participants.

Strengths of the project include recommendations from the literature that could have a positive influence on student success if implemented through the TS program at SCC. Substantive recommendations include (a) academic coaching, (b) professional development for TS program faculty and staff, (c) collaboration between the TS and SSS programs at the college, (d) collaboration between TS program staff and the college faculty to strengthen the summer bridge program, and (e) partnering with the Institutional Effectiveness Office to improve the evaluation of TS program services. The project goal is to improve the college readiness of students served by the TS program. According to McDavid and Hawthorne (2006), program effectiveness provides stakeholders with the needed information about whether assessment results are consistent with the intended program outcomes. The use of formative evaluation provides an opportunity for modification and continuous improvement beginning with the white paper recommendations. The use of summative evaluation provides an overall view of the program effectiveness. The college can use the information to make informed decisions

about the strength of the program, and through collaboration, other intervention programs, and services provided by the college.

Recommendations for Alternative Approaches

The results of the study did not establish a statistically significant relationship between the TS program and college readiness and overall college success. One limitation was the sample size that was limited to TS alumni who attended SCC. The results may have been different for students who met the requirements to attend 4-year colleges or universities. Another limitation was that program outcomes can be affected by other external factors. This study did not consider the qualification, motivation, or commitment of the staff that provided the training and instructions and whether or not all parties involved were wholly engaged in the mission, goals, and objectives of the program. The commitment of the stakeholders can affect the results. According to Contreras (2011), one of the apparent features of successful intervention programs, but not always indicated, was “the passion, dedication, and commitment of staff to improving the lives of youth in these programs” (p. 522). I have three recommendations for future research that would help mitigate these limitations:

1. Conduct qualitative research to explore students’ perceptions of the TS program, TS program faculty quality, and TS program faculty commitment.
2. Longitudinal evaluation research to monitor and determine the ongoing effectiveness of the TS program.
3. Analyze and report socioeconomic status for all participants.

The recommendations for ways to address the problem differently are clearly outlined in Section 3 and the white paper. The recommendations included (a) redesigning the advising component by adding intrusive counseling and coaching, (b) provide ongoing assessment of services, and (c) create a culture of collaboration. The approach to the problem should be viewed holistically and reflectively to address every known concern that hinders student success.

Scholarship, Project Development and Evaluation, and Leadership and Change

The process of completing my doctoral study has been beneficial both personally and professionally. Personally, through extensive reading and research, I have identified best practices in education and innovative ways on how to prepare my three children with the necessary college readiness skills to be successful. Professionally, I have gained insight that I will use to address the needs of students I serve daily. I believe education can change the lives of people for generations; therefore, it is my passion to provide students with every opportunity to be successful. That opportunity entails providing the necessary support. My experience in working in education has been valuable; however, my doctoral studies and research have provided the necessary tools and knowledge that will help me implement improve effective solutions to help students. This process has been an awesome learning experience.

Project Development and Evaluation

Research-derived project development involves the major steps of defining an education problem that needs attention, learning about the problem from scholarly literature, developing an appropriate study design, obtaining necessary approvals to

ethically involve and protect participants, collecting actual data, studying the problem by applying appropriate analytic techniques, and developing an appropriate project deliverable tempered through the research findings, original literature review, and project genre literature review. Through the process of conceptualizing, designing, and conducting my own project study, I have earned a better appreciation for education research that aims to explore and create evidence-based solutions. I learned the importance of being organized and methodical, and the need to adhere to accepted writing and reporting methods so that my research results can be more widely disseminated and more readily consumed by the scholarly community at large. My doctoral research experience has given me the confidence to discuss education problems with other scholars and participate meaningfully to discover and vet education solutions.

Leadership and Change

As the demographics in the U.S. change and the state and national government continue to mandate an increase in graduation rates, leaders in education will have to make fundamental changes in how they serve the educationally disadvantaged. Leadership plays a critical role in the process of change. Accountable leadership involves acknowledging problems, seeking to understand common problems through the lens of published studies, collecting and analyzing data, and setting clear and concise goals to address the problem while working collaboratively with others to implement the best possible solutions. Good leaders, therefore, understand the significance and value of collaboration and evaluation. Leaders in education must be concerned and involved in the process, and must be concerned about the success of all students. According to

Newman (2012) leaders in higher education must be willing to embrace opportunities, expand access, improve the achievement of students, and increase student learning.

Reflection on Importance of the Work

I never fully understood the importance of research until I engaged in this project study. I chose the topic because I was passionate about seeking possible solutions to helping academically disadvantaged students become more successful. Through the process, I have acquired knowledge and expanded my understanding of basic research, and the process has led to the provision of new service initiatives at my own college. I have a new appreciation for the amount of time required to conduct research. My recommendations to improve services for first-generation, low-income, and minority students is based on the extensive research as published by others and my own research as shared here. As a scholar, I can direct colleagues to resources that can help with making informed decisions. I have acquired new skills to objectively identify important problems, locate and consume relevant literature about problems, and design evidence-based solutions that can be applied in response to the problem. Combined with the altruistic mission of leading positive social change, my doctoral program and research experience has created a sense of urgency to promote evidence-based social change as a part of my own leadership and education roles.

Analysis of Self as Practitioner

My research has served to increase my understanding of the populations I serve, and this, in turn, will inform my work as Dean of Students and prepare me to serve in positions of increasing responsibility. As a practitioner, I have worked to implement

proven solutions to other programs that fall under my supervision. Through this research experience, I have gained a new appreciation for advisors, faculty, and staff who work directly with students daily. My doctoral experience with Walden University's commitment to positive social change has given me new insights and helped increase my focus to make an influence in the lives of individuals within our local communities, state, and nation.

Analysis of Self as Project Developer

Developing my project was a daunting task. Although I knew I wanted to research information on first-generation, low-income, and minority students and their struggles in higher education, I did not know how to make the connection for my project study. After researching many topics and meeting with colleagues, I was finally able to develop a project that I believed would be beneficial not just to the administrators and students at SCC, but would provide solutions and recommendations for future research. This research experience has given me the opportunity to develop a new skill that I previously had not possessed. As an experienced project planner, I now have the confidence to study a problem and develop an appropriate project-based solution for its remedy.

The Project's Potential Impact for Social Change

The white paper project developed for this study contains the results and recommendations derived from analyzing the data. The findings of this project study revealed no significant influence of the TS program on college readiness or success, yet the literature is replete with information that demonstrates intervention program success

for helping underrepresented students in other colleges. The aim of the project white paper, therefore, shifted from recommendations based on my own data analyses to a review my findings with best practice recommendations from the literature. My hope is that my recommendations will drive improvements to the TS program at my college. Because the project recommendations are not program specific, the best practices white paper recommendations should enhance any intervention program. In short, through the implementation of formative and summative evaluations, the TS program will improve the services it provides to students and this, in turn, should lead to increased student success.

Implications, Applications, and Directions for Future Research

Implications

As the scholarly literature has revealed throughout this project, college readiness for underrepresented students in higher education remains a challenge for many colleges and universities. As stated by Engstrom and Tinto (2008), access without support does not provide opportunity for students. Student success is important to the administrators at SCC and educators as a whole; therefore; the project provides educators with an understanding of strategies and activities needed to improve the overall success of students. The implications from this study derive from the recommendations to (a) implement strategies that can be used to increase the success of students, (b) implement a coaching program that will encourage and help students deal with both academic and nonacademic issues, and (c) create synergies that come from increasing interprogram collaborations among educators.

Application

This study contributes to the body of work that focuses on services that affect first-generation, low-income, and minority students. The findings suggest that intervention programs must do more than offer a few workshops, college trips, and tutorial programs. It is important to evaluate the effectiveness of staff, the effectiveness of services provided, and the influence services have on the intended outcome, which is to prepare students for college. The information discussed in this project will provide a starting point for planning and additional discussion among educators. The activities and strategies discussed in this project will have a broader application for all students. Data can be useful in determining the influence of services for students that are not first-generation, low-income, or minorities.

Future Research

I found limited literature on the influence of TRIO programs and other intervention programs. Scholars and students could benefit from studies that outline proven solutions. The project provided with this study entails a framework for improving the quality of services to low-income, first-generation, and minority students based on the literature that provides evidence for helping this population of students. Future research could involve a similar study determining the influence or relationship between services such as coaching, increased collaboration, and summer bridge and college readiness.

Conclusion

Although this project revealed no significant influence of TS services on college readiness or FYGPA, I gained valuable insights on ways to improve services that will

have a positive influence in this and other colleges. Before beginning the doctoral program, I was an advocate for underrepresented students in higher education. My advocate role was primarily because I was an underrepresented student in higher education (minority, first-generation, and low-income) myself. However, with continuous support through intervention programs like student support services, I was able to graduate from a 2-year college, transfer to the flagship college in the state, and then graduate. I was also able to obtain a master's degree and work towards completing my doctoral studies. I was given the opportunity to return to the same 2-year college I attended to work with students who are experiencing the same challenges that I experienced more than 25 years earlier. My personal experiences with supportive academic environments, positive intervention programs like TS, and caring faculty and administrators, together with my experience in the doctoral program and capstone research project all combine to strengthen my resolve for helping underrepresented students achieve success in career and life.

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Appendix A: The Project

The Impact of Talent Search Program on College Readiness

Introduction

The National Center for Education Statistics (NCES, 2010) classified underrepresented students in higher education as low-income, minority, and first-generation students. According to the Alliance for Excellent Education (2013), African-American and low-income students graduate from high school at a lower rate (63%) than the state average of 72% and the national average of 79%, and even fewer are entering or graduating from college. The NCES (2010) also reported that the underrepresented population is more likely not to attend college or drop out of college after the first year because of academic performance and nonacademic issues. Additional studies have revealed that community colleges are often considered the only viable option for underrepresented students because this population is at a higher risk for not attending, not being prepared, or not completing college (Contreras, 2011; Franks, 2012; Pitre & Pitre, 2009).

Local Problem

The acceptance and implementation of intervention programs in the United States have been instrumental in promoting student success in higher education, especially among the underrepresented populations (Contreras, 2011). In 1992, SCC received a federal grant to implement the TS program under TRIO. TRIO is the name used by the federal government for programs designed to improve access and success for underrepresented students. Despite the many efforts by the local TS program to improve

academic preparation and college readiness, limited data were available on the overall effectiveness of the TS program on student success in higher education. Administrators at the college noticed that although the college was enrolling a large number of TS alumni, the COMPASS exam revealed that more than 60% of the freshmen entering SCC tested into developmental courses and were struggling to meet requirements to enter gateway courses (first-year English composition and college algebra). Regardless of SCC's efforts to improve academic preparation through the TS program, the increase in students requiring developmental courses resulted in students' frustration and student leaving before their second year in college.

Evidence of the Problem

Students entering college unprepared and requiring developmental intervention is not unique to SCC. A recent national longitudinal study reported, "three out of five high school students who enroll in community colleges need to take at least one remedial course to acquire the basic skills necessary to succeed in college-level courses in a particular subject" (Cooper, 2011, p.23). ACT, Inc. (2011) defined college and career readiness as the ability to enter college with the knowledge and skills needed to enroll in credit level courses. Wu (2012) reported that the widening gap in college access and success is primarily due to a lack of college readiness. The number of students enrolling in higher education institutions has increased, yet many high school graduates lack the necessary college readiness skills needed to be successful in postsecondary education (Harvey, Slate, Moore, Barnes, & Martinez-Garcia, 2013). College preparation is of particular importance because, as Wu (2012) explained, college readiness leads to degree

attainment, which is a means of increasing cultural capital for many low-income, first-generation, and minority students. Raising the level of academic achievement for low-income, minority, and first-generation students will benefit all stakeholders. According to Johnson-Weeks and Superville (2014), this population is entering higher education underprepared, and few find the necessary support to be successful. Therefore, this study sought to understand the challenges that lead to academic failure for this population and determine if the local intervention program aid in preparing this population for higher education.

Conley's (2010) four facets of college readiness—student behaviors, financial support, parental support, and overall college knowledge—go beyond academic preparation. Confirming Conley's theory, other researchers have indicated that nonacademic concerns must be addressed for students to reach their full potential academically (Bettinger & Baker, 2011; Li, 2012). The primary goal of a white paper is to

- share and disseminate a concise discussion of the research problem, results, and make recommendations for improvements (Kemp, 2005).
- affirm what the TS program is currently doing in light of no significant statistical findings. Suggestions from other intervention programs that have been successful are needed to illuminate best practices for improving the local TS program.

Data Analysis

A quantitative study was conducted to examine whether participation in the TS program influenced college readiness as determined by COMPASS scores in writing and

reading, and college success as determined by FYGPA of TS participants at SCC.

Archival data from COMPASS placement exams and FYGPA were analyzed. The independent variable in this study was participation in the TS program, which was also the intervention. Two dependent variables included the COMPASS scores in writing and reading. A third dependent variable was the student participants' FYGPA.

All TS students who attended SCC in fall 2011, 2012, and 2013 were candidates for this study. Sixty TS participants selected were first-year students who entered during the fall semesters. An equal number of first-year students who enrolled at SCC 2011, 2012, and 2013, but did not participate in the TS program were randomly selected for participation in the study using ex-post facto data.

Research Questions and Hypotheses

The research questions and hypotheses that guided this study are:

RQ1. What is the difference in FYGPA between TS program participants and nonparticipants?

*H*₁₀: There is no significant difference in FYGPA between TS program participants and nonparticipants at SCC.

*H*_{1a}: There is a significant difference between FYGPA for TS program participants and nonparticipants at SCC.

RQ2. What is the difference in COMPASS writing scores between TS program participants and nonparticipants?

*H*₁₀: There is no significant difference between COMPASS test scores in writing for TS program participants and nonparticipants at SCC.

$H1_a$: There is a significant difference between COMPASS test results in writing for TS program participants and nonparticipants at SCC.

RQ 3. What is the difference in COMPASS reading scores between TS program participants and nonparticipants?

$H2_0$: There is no significant difference between COMPASS test scores in reading for TS program participants and nonparticipants at SCC.

$H2_a$: There is a significant difference between COMPASS test scores in reading for TS program participants and nonparticipants at SCC.

Findings

This section discusses the findings and presents the results showing any impact the TS participation had on FYGPA and COMPASS writing and reading scores compared to non-TS participants ($N = 120$). The research questions asked if there was a significant difference in FYGPA and COMPASS writing and reading scores of students who participated in the TS program and those who did not. Statistical analysis did not show any significant difference at the alpha .05 level. Therefore, the null hypotheses for the three research questions were not rejected. While further study with a larger sample population could yield significant results, the sample size employed in this study was sufficient based on statistical power analysis, and the results were clear that TS alumni attending SCC did not differ statistically from non-TS participants on the COMPASS scores evaluated (reading and writing) or FYGPA.

Recommendations

A number of factors may have influenced the results. Based on research, creating an environment that supports the needs of students is vital to the success of students (Byrd, 2015). As stakeholders invest more resources, they are asking for evidence of student success. According to Slager and Oaks (2013), the need for evidence calls for better assessment of programs and services. Webberman (2011) highlighted the importance of thinking like students to understand what is needed to help them succeed. According to Karp (2011), efforts to improve persistence should focus on processes, not programs. Karp emphasized participation alone did not improve outcomes. Although the TS program's primary focus is access, Engstrom and Tinto (2008) pointed out that access without support neither ensures success nor provides authentic opportunity for students.

For decades, the ability to retain and graduate underachieving, underrepresented students has been a challenge because of the many barriers faced by this population that has not been addressed (Bettinger, Boatman, & Long, 2013). Researchers have indicated that nonacademic concerns must be addressed for students to reach their full potential academically (Bettinger & Baker, 2011; Li, 2012). A wealth of research exists on factors that influence college readiness among this underrepresented population in higher education (Contreras, 2011; Dennis & Osterholt, 2011; Garcia & Paz, 2009). However, a fundamentally different approach must be taken on how to understand and serve low-income, first-generation, and minority students. Using a holistic and collaborative approach has proven to be an effective approach to addressing student challenges (Dennis & Osterholt, 2011). This approach involves both staff and support staff at the secondary

and post-secondary level understanding common barriers and together meeting the needs of the learner (Dennis & Osterholt, 2011). The holistic approach also involves staff being committed to the success of students, which is the primary mission of pre-college and intervention programs.

Student success involves much more than attaining academic skills (Conley, 2010). A holistic approach addresses every aspect of the student's environment that enables students to reach their full potential (Mahmoudi, Jafari, Nasrabadi, & Liaghatdar, 2012). The holistic approach challenges a system that focuses on academics alone but believes that students should be viewed as a whole. Webberman (2011) added "the more educators work together and look at the whole student, the better the students will be served" (p.20). The holistic approach involves assessing needs, determining the best resources, and providing continued support (Honken & Ralston, 2013). The approach to the problem should be viewed holistically and reflectively to address every known concern that hinders student success.

Recommendation 1: Redesign advising by adding intrusive counseling and academic coaching components. TS counselors are responsible for serving more than 900 students at the local middle and high schools. Approximately 150 students are either in the 11th or 12th grade. Counselors provide group sessions once a month for middle and high school students (Mitchell, 2010). In the secondary schools served by the TS program, preparing the underrepresented students remains a challenge because of the nonacademic concerns. Underrepresented students face many difficulties, such as lower aspiration to attend college, families with little to no education experience beyond high

school, limited finance, destructive peer support, and adverse environments (Welton & Martinez, 2014). These factors create barriers for students as they transition from high school to college. A growing trend in the academic culture to address both academic and nonacademic barriers is academic coaching. According to Webberman (2011), academic coaching fosters a climate that will help students address concerns in all areas of life. Webberman pointed out that academic coaching is about making emotional connections and encouraging ongoing support to help students produce positive results in their lives. Byrd (2015) noted the positive impact coaching had on high school students. Byrd indicated students enjoyed the individual attention and gained confidence as a result of the coaching program that led to their academic success. SCC participated in one of the largest coaching programs with Inside Track. SCC has empirical evidence that coaching has increased achievement and retention rates for at-risk students at SCC (director of success coaching, SCC, personal communication, March 9, 2016). According to Bettinger and Baker (2011), students coached through InsideTrack were more likely to remain in college and more likely to graduate than those who did not receive coaching.

Recognizing that many of the students lack social or academic skills needed for college, the TS program could incorporate academic coaching and intrusive counseling for the 11th and 12th graders. Research shows early intervention and support is vital to ensuring their success at the college-level (Adams, 2014). According to the International Coach Federation (ICF, 2016), the coaching concept started in athletic programs but has evolved more than a period of time (Sweet, Dezarn, & Belluscio, 2011). Sweet et al.(2011) defined academic coaching as “a coaching style relationship to enhance student

learning” (p. 79). Academic coaching for the TS program can begin with the assumption that early intervention that focuses on both personal and academic goals could improve student preparedness for college.

Academic coaching and intrusive counseling emphasizes accountability for both students and teachers. Counselors must initiate and cultivate relationships with students and high school teachers to focus on academic concerns and other nonacademic issues (Hartman, 2013). Hartman revealed that gaining entry into the classroom can be met with resistance. However, TS staff must demonstrate to students and teachers that the more successful students are in school, the more likely they are to graduate on time. Tinto (1999) asserted that student retention improves as student learning improves. Therefore, the involvement of all stakeholders (parents, teachers, and students) is vital. This kind of coaching relationship involves providing feedback and support to improve students’ success (Sweet et al., 2011). As Li (2012) noted that creating a learning environment is more than changing the climate at school or home; a learning environment nurtures the student confidence for achieving success. Establishing such an environment through student coaching can build self-esteem, confidence, and persistence. Students are more likely to ask for help with subject matter than they are to seek guidance with nonacademic matters; therefore, this coaching component aims at creating a supportive learning environment where students are comfortable seeking help in all areas. Li added when personal factors are addressed, and students have continued support, students are encouraged to pursue learning despite difficulties. To provide effective support, staff must be trained with the necessary skills.

Recommendation 2: Attend professional and staff development training to gain the necessary skill to improve the success of TS students. Professional and staff development may serve as a catalyst for improving services to TS students. Staff development can improve the effectiveness of staff members by providing focused professional development. To improve services to students, there must be an intentional effort to improve the outcome and effectiveness of the organization (Barham & Winston, 2006).

To engage students in intrusive counseling/coaching as recommended, TS counselors must have the necessary skills and tools needed to affect students. Professional development should be an avenue for advisors to understand the differences, challenges, and opportunities that first-generation, low-income, and minority students' face to meet and address the needs (Rodgers, Blunt, & Tribble, 2014). Focused staff development will also serve three additional functions: to bring awareness of the needs of the underrepresented population, enhance the quality services provide to this population, and enhance student achievement (Generation Ready, 2013). Elias (2009) shared areas of importance that can help at-risk students achieve academically. Two of the areas should be the focus of additional training for TS staff: understanding the importance of building caring relationships and helping students set reachable goals by creating realistic pathways to reach their goals.

Building caring relationships is a primary need for the underrepresented population (Elias, 2009). Coaching training will help develop the necessary tools to build meaningful relationships. Porumbu (2014) pointed out keys aspects of training must be

addressed for all coaches: self-competence, social competence, and professional competence. Porumbu believed “coaching refers to the process and not the content” (p. 340). Training programs provide the background in coaching followed by extensive practice in coaching before receiving certification. According to Webberman (2011), training provides advisors with the necessary skills to make emotional connections, gain knowledge through asking powerful questions, and the ability to create a sense of order in the lives of students. Unlike academic advisors, trained coaches guide student academically, emotionally, and socially through the education pipeline.

A good coach training program provides several levels of training and certifies 11 competencies through ICF. Coaching competencies covered during ICF-endorsed training include (a) Meeting Ethical Guidelines and Professional Standards, (b) Establishing the Coaching, Agreement, (c) Establishing Trust and Intimacy with the Client, (d) Coaching Presence, (e) Active Listening, (f) Powerful Questioning, (g) Direct Communication, (h) Creating Awareness, (i) Designing Actions, (j) Planning and Goal Setting, and (k) Managing Progress and Accountability. Training could run from 4-18 weeks depending on the desired level of training and certification (ICF, 2016).

For students to feel comfortable communicating their frustration about academic and nonacademic concerns in and out of school, there must be trust. Gold, Edmunds, Maluk, and Reuman-Moore (2011) pointed out the findings from one study that revealed students left school because they felt no one cared, no one had time, and no one knew them personally. Through staff development and training, TS staff can learn the importance of building caring, personalized relationships with students to encourage

them to remain in school and work towards achieving academic goals. Kearney, McIntosh, Perry, Dockett, and Clayton (2014) emphasized that one of the key factors to improve educational outcomes for all students was the development of relationships, especially for children that do not have strong relationships outside of their educational setting. Elias (2009) indicated only after building a relationship with students will advisors have the platform to discuss concerns and assist students in setting realistic goals.

Underrepresented students often set unrealistic goals based on media portrayals and mass culture (Elias, 2009). It is important to assist students in setting specific, clearly defined goals. Through staff development, TS advisors can help students with a step-by-step action plan to reach goals. Goal setting is about setting priorities that place students in charge of their learning and ultimately their lives (Newman, 2012). Too many high school students leave high school with limited goals and no direction. Early career assessment that focuses on interest and abilities will help students set realistic goals in choosing a college major and eventually a career. According to Robinson (2012), institutions of higher learning must stress interdisciplinary collaboration efforts both internally and externally to develop initiatives that address the diverse needs of students that create barriers to academic success.

Recommendation 3: Create a culture of collaboration. Collaboration can be the key to overcoming challenges, improving an overall educational environment, and addressing diverse student needs (Poulos, Culberston, Piazza & D'Entremont, 2014). Improved collaboration involves coordination and cooperation among all parties and

although all three work towards a shared goal, they differ significantly. Collaboration can be defined as two or more groups coming together to meet a shared goal that may not otherwise be accomplished (James, 2014). The lack of collaboration between K-12 and higher education has created barriers to success for many students especially in the areas of college readiness and completion (Rippner, 2015). Students graduating from high school college-ready is in the best interest of both K-12 and higher education. For many states, the amount of resources spent on remediation can be allocated to another educational initiative that will give students an opportunity to participate in programs that will prepare them for college. Stakeholders are relying on both sectors to address barriers that contribute to this lack of collaboration.

Rippner (2015) revealed several barriers to interagency collaboration identified by. The barriers included political barriers, leadership barriers, legal barriers, mission barriers, resources barriers, and bureaucratic barriers. Each of these barriers must be addressed for there to be real collaboration between two sectors. Both K-12 and higher education institutions have overarching educational goals that can be addressed through improved collaboration. Using creativity, collaboration can begin at the local level. Because the local TS program is housed on the college campus but serves students in K-12, this can serve as the catalyst to bring both sectors together at the local level to discuss strategies that will address college readiness.

The summer bridge program conducted by the TS program was designed to prepare students academically for the next grade level and ultimately for the rigors of college-level coursework. All summer classes in the areas of English, math, and science

are taught by secondary teachers. The summer program staff could benefit from collaborating with college faculty on college level standards. Haycock (2010) discussed the importance of curriculum alignment in preparing students for college. Rarely do college instructors and secondary instructors discuss content alignment that could lead to college readiness (Conley, 2010). Adams (2014) supported the collaboration between K-12 faculty and college but reported that many administrators at both levels acknowledge they are not collaborating effectively. Engaging college faculty in designing the summer bridge curriculum would provide clear signals as to what student should know before entering college (Achieve, Inc., 2011). The TS summer programs accept student in grades six through 12. Adams (2014) indicated creating a seamless, personalized system involves blending the standards sooner than later. Improving the connection between high school and college courses could lead to better student performance.

These initiatives must be creative and cost-effective. The transition from high school to college can be overwhelming for students underrepresented in higher education. Intervention programs have been known to provide the supportive environment to strengthen the bridge from high school to college; however, according to Contreras (2011), their effects end when the program service delivery ends. The TS program provides little to no follow-up with alumni once they enter college, which creates a barrier because underrepresented students rely heavily on the continued support (TS director, personal communication, November 10, 2015).

Student Support Services (SSS) is an intervention program at SCC that also serves first-generation, low-income, and minority students. Collaboration between the

TS program and SSS program would likely help achieve the greatest level of success for students as they transition. Access to an ongoing supportive environment that provides similar support is likely to influence students to remain in college. The SSS program provides tutoring, advising, personal counseling, scholarships, workshops, and ongoing support. The SSS program has four primary goals: to retain, to graduate, to transfer, and to foster an institutional climate supportive of first-generation and low-income students. This program encourages a strong sense of community among students and SSS staff (director, personal communication, January 7, 2016). Connecting TS alumni with the SSS program can provide a network in which student can rely on for support. Both programs share overarching program outcomes, which is to raise student achievement while providing support through the education pipeline. Data revealed the number of students transitioning to college immediately after high school is much lower among minority students. Those who transition immediately after high school encounter challenges to persistence (Contreras, 2011). The partnership between TS and SSS exposes students to peers with similar goals and aspirations. Contreras indicated this environment would likely influence students positively. According to Engstrom and Tinto (2008), when students are placed in a supportive learning environment, they feel “less alone and more confident of their ability to succeed in college” (p. 48). Effective collaboration will promote an easier transition for low-income, first-generation, and minority students and provide supportive services to help students excel academically.

Evaluation

Summative and formative evaluations will be conducted to provide useful feedback for decisions. Formative evaluation assesses the implementation and evaluates the development of a program to strengthen and improve the program's intended outcomes (McDavid & Hawthorn, 2006). This evaluation was chosen to provide ongoing feedback for program modification and feedback to the stakeholders about the implementation of the recommendations. Providing this information will help SCC administrators better understand why the COMPASS scores and FYGPAs of TS participants and non-TS participants did not differ despite the implementation of TS services. A survey will be conducted via the website (Survey Monkey) where staff will be asked to give feedback on the overall professional development training. The ranking scale will be a 5-point, Likert-scaled (see Appendix A). The evaluation will be to track staff development skills and knowledge, and make informed decisions about further training. Services will also be evaluated by participants (see Appendix A) to understand their development and knowledge and skills obtained as a result of services provided. This feedback will also help staff strengthen and improve services. Descriptive statistics will be used to analyze results to determine if the training is effective or should be changed. Feedback will be shared with SCC administrators.

Formative evaluation is essential in producing a corrective action plan to address issues as they occur (Yi, 2012). The white paper includes recommendations that can be implemented immediately. The overall goal was to provide recommendations that may improve the outcomes of TS alumni. Conducting a formative evaluation requires

ongoing assessment to determine what works, what does not work, and why. According to Beyer (1995), formative evaluation should be ongoing, involve assessment, and seek accurate information for feedback and improvement.

Formative evaluation was selected for this project for two reasons. First, it was important to have the flexibility of requiring ongoing assessments to make needed changes. Formative evaluation provides for opportunity for modification for continuous improvement. Summative evaluation, although useful, does not lend itself to flexibility because usually the assessment occurs at the end of the implementation phase. Secondly, with limited resources, it was the most cost-effective way of assessing intended outcomes. Beyer (1995) noted that formative evaluation is a useful and cost-effective way to determine the effectiveness of a program.

The key stakeholders will be the president and cabinet, TS director, TS advisors, and students. Seeking evaluative advice from key stakeholders during the development stage is vital (Beyer, 1995). The feedback from stakeholders and students will help avoid continuing with ineffective activities and provide feedback about service that has caused an immediate positive effect. Formative evaluation allows the evaluator to evaluate activities while they are occurring so that intervention can take place immediately to improve the interventions (Yi, 2012). The goal is to improve college readiness skills for TS participants and alumni.

Summative evaluation will be used to determine whether the program has achieved intended outcomes (Beyer, 1995). The intended outcome is to increase college readiness and overall success among TS participants by decreasing the number of

participants enrolling in developmental courses at SCC and increasing the number of TS participants successfully completing the first year of college at SCC in good academic standing. Each year the evaluator will collect the same dependent variable data (COMPASS reading and writing scores and FYGPA) and apply the same *t* test analyses to see if the program is beginning to achieve the intended outcome. The ongoing assessment of services could provide the necessary feedback to staff on the impact the program.

Periodic evaluations of services should include the defining and measuring of outcomes to demonstrate that services are contributing to student development or student learning (Slager & Oaks, 2013). According to Slager and Oaks (2013), “assessment goes beyond accountability for student learning; it helps demonstrate the worth of services and programs” (p 25). Byrd (2015) noted that to track the effectiveness of a program, students’ progress must be monitored. The purpose of assessment is to demonstrate a commitment for improvement. Assessment will involve a “combination of quantitative and qualitative inquiry, direct and indirect methods of measurements, and formative and summative means of evaluation” (Powers, Carlstrom, & Hughey, 2014). TS provide a variety of services to develop students and prepare them for college. The TS program will benefit from having activity goals and objectives in place for assessing the impact on student learning and development.

Conclusion

Literature has revealed that precollege intervention programs have been considered important approaches to strengthening the bridge to higher education for

underrepresented students (Contreras, 2011). The changing demographics in the United States will also change the demographics of higher education, which further demonstrate the need for pre-college and intervention programs. As noted, students from low-income families, ethnic backgrounds, and first-generation students face many challenges upon entering college. The goal of the project is to improve supportive services provided to low-income, first-generation, and minority students. Improved services could raise the persistence and graduation rates among this population. As noted by Wu (2012), college readiness leads to degree attainment, which is a means of increasing cultural capital for many academically challenged students.

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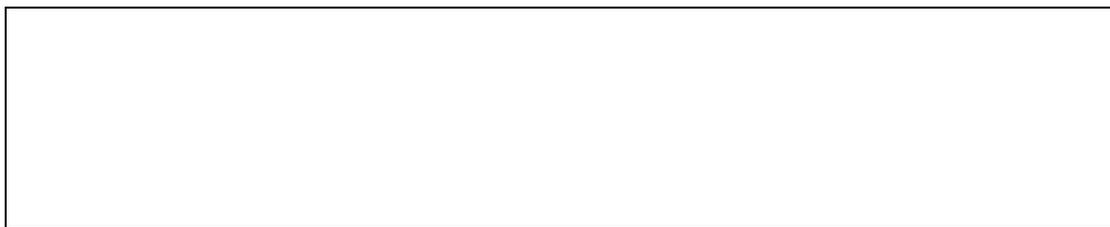
Training Evaluation Form

Relevance of Training	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The objective of the training was clearly defined					
Participation and interaction were encouraged					
The training experience will be useful in my coaching sessions					
The trainer was knowledgeable					
The trainer was well prepared					
The time allotted for the training was sufficient					
The training sessions will help me build stronger relationships with students					
Additional training is needed before I can begin independent coaching sessions					

What do you believe some of the challenges will be in implementing the Coaching program?

If you have any further comments about how far the training helped you develop skills or knowledge in these areas, please add them here

What things (equipment, skills, additional training) might you need to help you apply what you've learned?

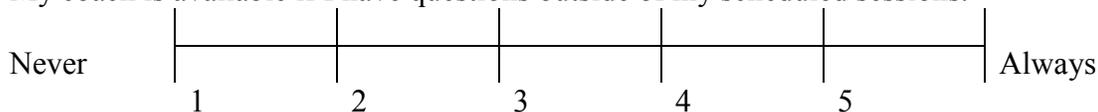


Student Coaching Evaluation Form

My coach runs effective sessions. The session time is appropriate to meet my needs.



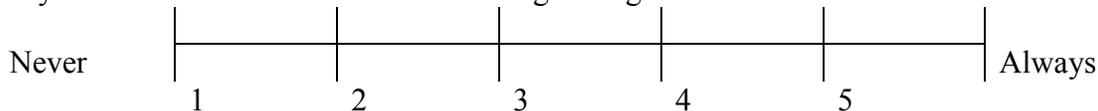
My coach is available if I have questions outside of my scheduled sessions.



My coach helps me to set priorities with academic and nonacademic issues.



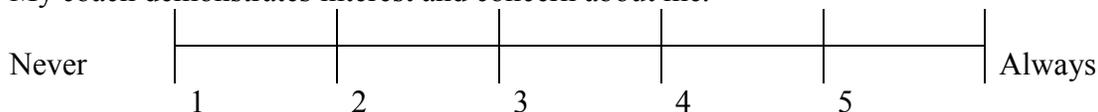
My coach assists with short-term and long-term goals



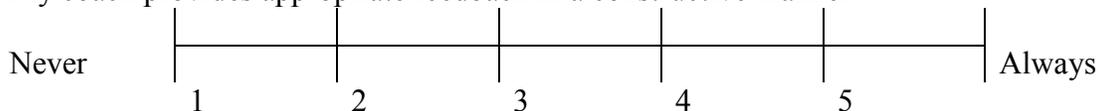
My coach follows-up to make sure I am on task.



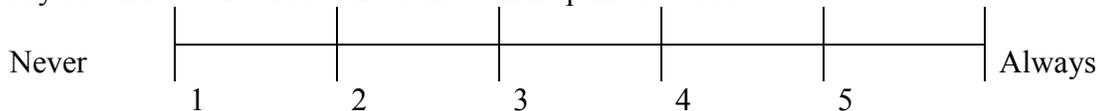
My coach demonstrates interest and concern about me.



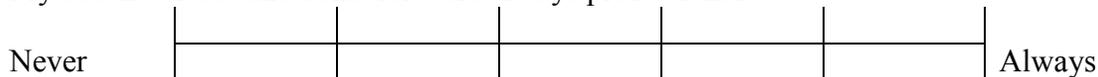
My coach provides appropriate feedback in a constructive manner



My coach is aware of resources that can help me succeed.

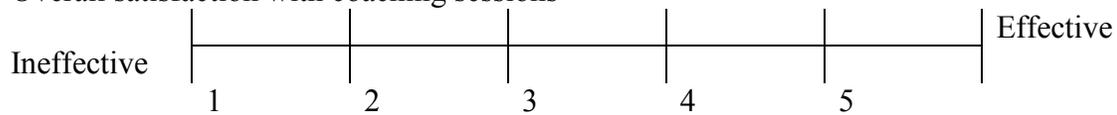


My coach attitude and behavior were always professional.



1 2 3 4 5

Overall satisfaction with coaching sessions



Additional Comments:

Appendix B: Raw Data

TS Participants

Student #	Term	Program	First Time	Full Time	GPA	Sex	Race	High School	Writing	Reading
14769	20111	T02	Y	Y		2.6 F	B	DALLAS COUNTY HIGH	72	63
14782	20111	CIS	Y			2 M	W	DALLAS COUNTY HIGH	56	67
14789	20111	NAS	Y	Y		0 F	B	DALLAS COUNTY HIGH	89	87
14394	20111	ELT	Y	Y		2.917 M	B	DALLAS COUNTY HIGH	67	47
14833	20111	T02	Y	Y		3.75 F	B	DALLAS COUNTY HIGH	61	65
15081	20121	T02	Y	Y		1.5 M	W	DALLAS COUNTY HIGH	81	73
1541	20121	T02	Y	Y		3 F	B	DALLAS COUNTY HIGH	65	70
15126	20121	OA1	Y	Y		3.188 F	W	DALLAS COUNTY HIGH	65	84
15699	20121	T02	Y	Y		1.417 F	B	DALLAS COUNTY HIGH	67	67
14870	20121	T02	Y	Y		1.462 F	B	DALLAS COUNTY HIGH	79	61
15022	20121	T02	Y	Y		0 F	B	DALLAS COUNTY HIGH	65	66
1527	20131	OA1	Y	Y		2.875 F	B	DALLAS COUNTY HIGH	47	77
15007	20121	T02	Y	Y		2 F	B	FRANCES MARION HIGH	89	52
14597	20111	T02	Y	Y		2.25 F	B	KEITH HIGH SCHOOL	51	83
17929	20111	T01	Y	Y		3 F	B	KEITH HIGH SCHOOL	71	88
14602	20111	T02	Y	Y		0.75 F	B	KEITH HIGH SCHOOL	99	80
17925	20111	T02	Y	Y		3.571 F	B	KEITH HIGH SCHOOL	25	59
15089	20121	LPN	Y	Y		0 F	B	KEITH HIGH SCHOOL	87	82
1519	20121	T02	Y	Y		1.25 F	B	KEITH HIGH SCHOOL	99	90
15064	20121	INT	Y	Y		3.167 M	B	KEITH HIGH SCHOOL	91	62
15017	20121	T02	Y	Y		2.75 F	B	KEITH HIGH SCHOOL	74	77
1503	20121	LPN	Y			0.5 F	B	KEITH HIGH SCHOOL	93	70
15356	20131	T02	Y			2 F	B	KEITH HIGH SCHOOL	48	72
15328	20131	T02	Y	Y		0 M	B	KEITH HIGH SCHOOL	99	79
14969	20111	T02	Y	Y		3 F	B	SELMA HIGH SCHOOL	67	73
14940	20111	T02	Y	Y		2.071 F	B	SELMA HIGH SCHOOL	18	68
14272	20131	T02	Y	Y		0.8 F	B	SELMA HIGH SCHOOL	38	76
14999	20111	T02	Y	Y		3 F	B	SELMA HIGH SCHOOL	76	73
14903	20111	T02	Y	Y		3.3 F	B	SELMA HIGH SCHOOL	67	86
14857	20111	DDT	Y	Y		2.5 M	B	SELMA HIGH SCHOOL	45	56
14837	20111	T02	Y	Y		0.167 M	B	SELMA HIGH SCHOOL	56	80
14939	20131	T02	Y	Y		1.25 F	B	SELMA HIGH SCHOOL	45	91
14510	20131	NU1	Y	Y		2.8 F	B	SELMA HIGH SCHOOL	90	79
15406	20121	T17	Y	Y		3.667 F	B	SELMA HIGH SCHOOL	34	57
15075	20121	T02	Y	Y		0 F	B	SELMA HIGH SCHOOL	76	81
15307	20121	T02	Y	Y		2 M	B	SELMA HIGH SCHOOL	67	76
15393	20131	T02	Y	Y		1.5 M	B	SELMA HIGH SCHOOL	84	0
14587	20121	T02	Y	Y		2.769 F	B	SELMA HIGH SCHOOL	67	73
15109	20121	CIS	Y	Y		1 M	B	SELMA HIGH SCHOOL	25	65
15094	20131	T02	Y	Y		2 F	B	SELMA HIGH SCHOOL	25	53
15041	20121	T02	Y	Y		3.2 F	B	SELMA HIGH SCHOOL	25	65
15336	20131	WDT	Y	Y		1.4 M	B	SELMA HIGH SCHOOL	67	88
15342	20131	T01	Y	Y		0 F	B	SELMA HIGH SCHOOL	45	47
15316	20131	T17	Y	Y		2 M	B	SELMA HIGH SCHOOL	90	65
14846	20111	T02	Y	Y		0 F	B	SOUTHSIDE HIGH	4	48
14955	20111	T02	Y	Y		1.2 F	B	SOUTHSIDE HIGH	34	54
14973	20111	T02	Y			3.4 F	B	SOUTHSIDE HIGH	84	68
14839	20131	T02	Y	Y		1 F	B	SOUTHSIDE HIGH	67	62
14834	20111	T17	Y	Y		3 F	B	SOUTHSIDE HIGH	90	95
14587	20111	T02	Y	Y		1.083 F	B	SOUTHSIDE HIGH	27	61
14847	20111	T17	Y	Y		1.333 F	B	SOUTHSIDE HIGH	56	83
15092	20131	T02	Y	Y		0.6 F	B	SOUTHSIDE HIGH	76	80
15018	20121	T02	Y	Y		1.6 F	B	SOUTHSIDE HIGH	25	59
15163	20121	T02	Y	Y		3.625 F	B	SOUTHSIDE HIGH	67	68
15151	20121	WDT	Y	Y		1.75 M	B	SOUTHSIDE HIGH		
15132	20121	T02	Y	Y		3.857 F	B	SOUTHSIDE HIGH	67	63
15017	20121	T02	Y	Y		0.6 F	B	SOUTHSIDE HIGH	56	84
15141	20121	T02	Y	Y		1.091 F	B	SOUTHSIDE HIGH	11	39
15059	20121	MAS	Y	Y		3 M	B	SOUTHSIDE HIGH	76	80
15253	20131	OAS	Y	Y		1.909 F	B	SOUTHSIDE HIGH	98	81

Non-TS Participants Raw Data

Student	Term	Program	First Time	Full Time	GPA	Sex	Race	High School	Writing	Reading
148493	20111	CIS	Y	Y	0	F	B	DALLAS COUNTY HIGH	10	58
148466	20111	ELT	Y	Y	3.75	M	W	DALLAS COUNTY HIGH	79	73
14642	20111	T02	Y	Y	0	F	B	DALLAS COUNTY HIGH	60	80
1472	20111	WDT	Y	Y	2.6	M	B	DALLAS COUNTY HIGH	55	45
1488	20111	T02	Y		0	F	B	DALLAS COUNTY HIGH	46	66
1505	20121	T02	Y		2	M	W	DALLAS COUNTY HIGH	56	80
1503	20121	T02	Y	Y	1.5	F	B	DALLAS COUNTY HIGH	97	71
15174	20121	BUS	Y	Y	1	F	W	DALLAS COUNTY HIGH	67	80
15139	20121	T02	Y	Y	0.9	F	B	DALLAS COUNTY HIGH	87	75
15101	20121	T02	Y	Y	2	F	B	DALLAS COUNTY HIGH	66	78
15018	20121	T02	Y	Y	3.5	F	B	DALLAS COUNTY HIGH	20	65
1528	20131	OA3	Y	Y	1.2	F	B	DALLAS COUNTY HIGH		
14991	20121	T02	Y	Y	0	F	B	FRANCES MARION HIGH	24	67
14787	20111	T02	Y	Y	2.25	F	B	KEITH HIGH SCHOOL	74	67
1482	20111	T02	Y	Y	1.111	F	B	KEITH HIGH SCHOOL	93	81
1477	20111	T02	Y		0	F	B	KEITH HIGH SCHOOL	6	60
14787	20111	T02	Y	Y	3.75	F	B	KEITH HIGH SCHOOL	6	48
15039	20121	T02	Y	Y	1.25	F	B	KEITH HIGH SCHOOL	69	76
15174	20121	WDT	Y	Y	2.4	M	B	KEITH HIGH SCHOOL	45	70
13549	20121	T02	Y	Y	0	F	B	KEITH HIGH SCHOOL	73	62
15171	20121	BUS	Y	Y	4	F	B	KEITH HIGH SCHOOL	18	80
15063	20121	T02	Y	Y	0.429	F	B	KEITH HIGH SCHOOL	94	89
15351	20131	T02	Y		0	F	B	KEITH HIGH SCHOOL	78	97
15438	20131	T01	Y		0	M	B	KEITH HIGH SCHOOL	81	73
14850	20111	T02	Y	Y	2.286	F	B	SELMA HIGH SCHOOL	74	78
1489	20111	T17	Y	Y	1.2	F	B	SELMA HIGH SCHOOL		
14833	20111	T02	Y		0.333	F	B	SELMA HIGH SCHOOL	11	41
14427	20111	T02	Y	Y	3.385	F	B	SELMA HIGH SCHOOL	45	57
14892	20111	T02	Y		0	F	B	SELMA HIGH SCHOOL	34	56
14893	20111	T02	Y	Y	1	F	B	SELMA HIGH SCHOOL	76	69
1486	20111	DDT	Y	Y	2	M	B	SELMA HIGH SCHOOL	84	75
14934	20111	T02	Y	Y	3.375	M	B	SELMA HIGH SCHOOL	67	67
15033	20121	LPN	Y		2	F	B	SELMA HIGH SCHOOL	34	57
15188	20121	T17	Y	Y	0	F	B	SELMA HIGH SCHOOL	56	80
15126	20121	T02	Y	Y	2.6	F	B	SELMA HIGH SCHOOL	56	59
15174	20121	T02	Y		0	M	B	SELMA HIGH SCHOOL	76	69
1503	20121	T02	Y	Y	2	F	B	SELMA HIGH SCHOOL	76	84
15037	20121	T02	Y	Y	3.4	M	B	SELMA HIGH SCHOOL	67	77
1518	20121	BUS	Y	Y	2.5	M	B	SELMA HIGH SCHOOL	34	81
15183	20121	T02	Y	Y	3	F	B	SELMA HIGH SCHOOL	67	63
15175	20121	T02	Y	Y	1.333	F	B	SELMA HIGH SCHOOL	45	82
15034	20121	T02	Y	Y	3.538	F	B	SELMA HIGH SCHOOL	56	88
15375	20131	WDT	Y	Y	3.2	M	B	SELMA HIGH SCHOOL	90	87
15228	20131	T02	Y		2.909	F	B	SELMA HIGH SCHOOL	67	75
15303	20131	T17	Y	Y	2.6	M	B	SELMA HIGH SCHOOL	84	93
14978	20111	T02	Y	Y	2.75	F	B	SOUTHSIDE HIGH	76	95
14912	20111	T02	Y	Y	1.25	M	B	SOUTHSIDE HIGH	34	49
14945	20111	T02	Y		0	F	B	SOUTHSIDE HIGH	25	39
14552	20111	T02	Y		4	F	B	SOUTHSIDE HIGH	45	70
14947	20111	T02	Y		2.5	F	B	SOUTHSIDE HIGH	45	45
14536	20111	T02	Y	Y	2.6	F	B	SOUTHSIDE HIGH	45	84
14560	20111	T02	Y		0.545	F	B	SOUTHSIDE HIGH	34	63
15167	20121	T02	Y	Y	2	F	B	SOUTHSIDE HIGH	76	78
15565	20121	T02	Y	Y	2.615	F	B	SOUTHSIDE HIGH	76	70
15019	20121	T02	Y	Y	3.4	F	B	SOUTHSIDE HIGH	76	87
15014	20121	T02	Y	Y	0.6	F	B	SOUTHSIDE HIGH	6	55
15190	20121	T02	Y	Y	3	F	B	SOUTHSIDE HIGH	67	66
14920	20121	WDT	Y	Y	1.8	M	B	SOUTHSIDE HIGH	11	65
15050	20121	MAS	Y	Y	3.6	M	B	SOUTHSIDE HIGH	4	63
153142	20131	BUS	Y	Y	1.636	F	B	SOUTHSIDE HIGH	17	71