Examining Self-Efficacy and Preparedness to Succeed in Post-Secondary Education: A Survey of Recent High School Graduates

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Abstract

Professional school counselors are charged with preparing students to be college and career ready and students may depend on their school counselor to provide them with a comprehensive plan for post-secondary options. Unfortunately, even with adequate access to academic knowledge and skills, not all students may be career and college ready due to the lack of confidence in their ability to succeed. Therefore, the purpose of this study was to explore the self-efficacy of high school graduates regarding their preparedness to succeed in a post-secondary education. Using a univariate of analysis of variance, the data collected from a sample of 154 college students were analyzed. Results indicated that when it comes to positive personal characteristics, Asian American students had statistically lower scores. Additional analysis also revealed that students from rural schools had lower academic competence regarding their self-efficacy. The article presents implications for school counselors, school counselors in-training, and counseling programs.

Keywords: career and college readiness, self-efficacy, school counselors

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Graduating from high school does not equate to preparation for a college education and may result in a gap relative to college readiness (Henry & Stahl, 2017). Preparation for college-level course work is a key component of elementary and secondary education. Placement and benchmark exams are created to measure a student's ability to perform at the college level. Unfortunately, these exams are typically inconsistent predictors of academic performance (Duncheon & Tierney, 2014). This leads to colleges focusing their resources on supporting students through advisory, tutoring, and the redesign of remedial courses, instead of creating college readiness programs that could provide preventive services for students facing social barriers (Bonner & Thomas, 2017).

College readiness' definition encompasses a wide range of domains, including areas such as curricular content, academic behaviors, cognitive strategies, and knowledge of a college environment (Bonner & Thomas, 2017; Conley & French, 2014; Tierney & Sablan, 2014). College readiness is often measured by a student's high school transcript, overall grade point average, course completion, class rank, or standardized college entrance exam scores (Malin et al., 2017; Tierney & Sablan, 2014). College readiness may be measured by determining whether students are prepared to succeed in college or career-training programs (Camara, 2013) and is becoming a growing concern for educational policymakers, practitioners, and researchers at state and local levels (Tierney & Sablan, 2014).

Thousands of students in the United States enroll in college without the skills needed to achieve academic success (Bonner & Thomas, 2017). Although a college education may result in numerous benefits, including higher rates of employment, and greater opportunities for health care, retirement, and financial stability, less than 60% of students who begin a bachelor's degree program complete their degree within six years at four-year colleges (Francis et al., 2018; Tierney & Sablan, 2014). Although college completion rates have increased in recent years, there are striking differences amongst demographics (Tierney & Sablan, 2014). Research shows that students of color, low-income students, and first-generation college students have lower attainment rates than non-minority, higher-income, or non-first-generation college students (Le et al., 2016; Henry & Stahl, 2017; Wilson & Lowry, 2017). Getting into college is only half the battle for students who enter underprepared for credit-bearing courses (Tierney & Sablan, 2014). Therefore, additional research on post-secondary students' experiences may help school counselors implement more effective programming and support.

The Role of the School Counselor

Schools are responsible for helping to prepare students to transition into either a college or career (Malin et al., 2017). More than 60% of the jobs in the United States require some form of post-secondary education (Pulliam & Bartek, 2018). Relatedly, professional school counselors are charged with preparing students to be college and career ready (American School Counselor Association [ASCA], 2019; Mullen & Lambie, 2016; Sanders et al., 2017). Students may depend on their school counselors to provide them with a comprehensive plan for post-secondary options. School counselors may serve as advocates for all students to ensure they are equipped with the necessary

skills that best prepare them for college and careers and play an even more vital role in serving students from underrepresented populations who may face additional challenges after graduation (Hines et al., 2011).

There has been an emphasis on post-secondary student preparedness, but school counselors often find their work not aligning with expected duties (Stone-Johnson, 2015). This may be attributed to a variety of factors including administrators' lack of awareness surrounding the role of the school counselor and not utilizing school counselors effectively to implement college and career readiness programs (Powers & Boes, 2013). Furthermore, school counselors are often assigned duties that do not directly assist with career and college preparation. ASCA and the College Board National Office for School Counselor Advocacy (NOSCA) have established guidelines and standards for implementing and advocating for college and career readiness across the K-12 settings (Pulliam & Bartek, 2018). Early exposure to career awareness may be critical for helping students to develop a sense of readiness (Pulliam & Bartek, 2018).

ASCA's Mindsets & Behaviors (ASCA, 2014) are a programmatic set of standards for school counselors. The standards identify and prioritize the specific attitudes, knowledge, and skills that students should be able to demonstrate before graduating from high school (ASCA, 2014). One of the domains of the standards is career development. School counselors help students understand the *school to work* relationship, as well as the transition to postsecondary education and the workforce. ASCA's School Counselor Professional Standards & Competencies (ASCA, 2019) also outline the importance of career planning with a comprehensive school counseling program, with specific focus on the school counselor's ability to provide appraisal and

assessments to help students understand their abilities, values, and career interests. School counselors may assist students in course selection, which can have major implications on student's options after high school (Hines et al., 2011); however, school counselors are not as involved as they could be in college and career preparation (Stone-Johnson, 2015).

College and Career Readiness

There are barriers that may prevent school counselors from fully engaging in college and career readiness programming within their schools. Counselor education programs may not provide school counselors with adequate knowledge and skills to develop comprehensive career and college programs that support the various needs of students. Additionally, programs may not be equipping counselors-in-training with skills necessary to engage with school leaders concerning preparation for life after graduation (Hines et al., 2011). Prospective school counselors may leave programs underprepared to use data to advocate and ensure that all students are college and career ready with access to post-secondary options. School counselors may not feel adequately prepared or able to address the complicated needs of all students when it comes to career and college readiness. School counselors should have focused training in areas of post-secondary education and be able to understand what characteristics make a student college and career ready (Stone-Johnson, 2015).

College and career awareness typically begins in elementary school, and is strengthened by exploration in middle school, and solidified via planning in high school. A pivotal time to make college and career decisions is during high school, and school counselors can play a vital role in helping the student navigate such decisions (Morgan

et al., 2014; Sanders et al., 2017; Tang et al., 2008). Research conducted by Lapan and colleagues (2012) indicates that schools with comprehensive school counseling programs that focused on college and career readiness were effective at decreasing disciplinary incidents and increasing college and career motivation. While parents are reported to be the biggest influence on plans, students report their school counselors were least helpful. Additionally, research has found that self-efficacy and learning experiences play a critical role in high school student career development (Baker, 2019; Tang et al., 2008). This research suggests that school counselors could do more to help students become knowledgeable as they make decisions and become career and college ready.

Self-Efficacy

The concept of feeling competent and prepared can be described as one's self-efficacy. Self-efficacy is the belief in one's ability to complete a specific task competently and successfully (Bandura, 1977, 1994, 1999). It is assumed that a person's self-efficacy is psychologically strengthened with the belief that the task can be performed to receive the desired outcome (Bandura, 1977). Educational performance is affected by one's belief in ability, goals, and expectations of outcomes (Sanders et al., 2017). Lack of self-efficacy can negatively impact one's ability to complete tasks, such as making postsecondary and career plans. Increasing self-efficacy may increase and sustain a person's efforts (Bandura, 1977,1994).

Although the study examines the self-efficacy of recent high school graduates, it is worth briefly discussing self-efficacy as it relates to school counselors. Researchers have explored the impact of school counselor self-efficacy on career counseling of

middle school students and found that while school counselors had sufficient self-efficacy in providing career counseling, their self-efficacy within multicultural competency skills and current trends in the world of work, ethics, and career research were lower (Sanders et al., 2017). This suggests that school counselors lack confidence in attending to gender, race/ethnicity, and social class considerations in career counseling. Individuals will be less likely to acquire the necessary levels of knowledge and skills as well as less likely to be confident in their ability to be ready for postsecondary education and careers if they do not have sufficient levels of self-efficacy (Bandura, 1994). Although the focus of this study was not the self-efficacy of school counselors, it is worth noting how school counselors' lack of self-efficacy to provide competent career and college support to diverse students can indirectly, and even directly, impact the college and career readiness of their students.

Examining the self-efficacy of students is as important, if not more, than the self-efficacy of school counselors. More than 60 percent of jobs in the United States require a college education (Dyce et al., 2013; Martinez et al., 2016). The high school diploma is becoming less sufficient as life and career choices are increasingly demanding a set of knowledge and skills (Feller, 2014; Martinez et al., 2016) that require post-secondary education or training. Despite the recent increase in diverse students enrolling in K-12 schools (U.S. Census, 2018), a racial and ethnic gap still exists in graduation rates. The statistics gathered for the College and Career Readiness Report (American College Testing [ACT], 2016) show that only 11% of Black students and 23% Hispanic students met at least three college readiness benchmarks compared to 45% of White students. Students who are not college ready are less likely to earn a degree (Martinez et al.,

2016; Royster, et al., 2015). Unfortunately, even with sufficient access to academic knowledge and skills, research suggests that students still fail to become career and college ready due to lack of confidence in their ability to succeed (Martinez et al, 2016).

Purpose of the Study

Despite the increased number of students enrolling in college or university, many students are inadequately prepared or unready to succeed in college or career settings. Therefore, this study's primary goal was to explore the self-efficacy of currently enrolled college students and their beliefs in their preparedness to succeed in college after graduation, specifically exploring the experiences of students of color. Because one of the duties of professional school counselors is to prepare students to be college and career ready, the study also explored the types of support students may have received from their school counselor in preparation for college. More specifically, the research questions were as follows: (a) What is the self-efficacy of recent high school graduates in their preparedness to succeed in a post-secondary education setting in relation to student race and high school setting? and, (b) Does the number of school counselor visits impact overall college and career self-readiness among college students?

Method

Procedure

Participants in this study were students enrolled at either a community, public, or private college or university within the Southeast region of the United States. Students were asked to participate via a listserv. Once this process was complete, participants were sent an electronic invitation via SurveyShare. Those interested in participating were advised to follow the link to the online survey. Upon opening the link, participants

were provided with a letter outlining the purpose of the study and the contact information of the researcher and the university's institutional review board to address any possible concerns or questions. Data were collected over a period of two weeks.

Survey Instrument

The survey used for this study, the Career and College Readiness Self-Efficacy Inventory (CCRSI), was designed to investigate student's self-efficacy surrounding career and college preparedness (Baker & Parikh-Foxx, 2012). The survey instrument consisted of fourteen items. Through exploratory factor analysis, the instrument developers identified four factors from the fourteen items which include (1) procedural and financial challenges, (2) positive personal characteristics, (3) academic competence, and (4) potential to achieve future goals. Coefficient scores ranged between 0 and 1, with scores closer to 1 having greater reliability (Gliem & Gliem, 2003). The Cronbach's alpha for this survey was reported as r = .857 (Baker et al., 2017). The 14 items (Likert scale) used in the CCRSI asked participants to respond to a variety of topics such as college preparedness, support systems, and educational-related skills. Seven additional items requested personal demographic information, which included race, gender, age, type of college setting, grade point average, high school setting, and an approximate number of times the student met with his or her school counselor throughout the senior year of high school in relation to college and career support. Four additional non-required questions were asked about specific preparation students received in high school. The survey included a combined total of 25 items.

Participants

Participants consisted of enrolled college students from the Southeast region of the United States. The survey was sent through a public university listserv, via student email. The survey was also sent to an English professor at a nearby Southeast region community college who taught introductory-level English courses to first-year college students. Participants were encouraged to share the survey with other eligible students. According to Table A1, 154 students participated in this study and White students made up 60% (*n* = 92) of the sample followed by 15% (*n* = 23) Black, 8.5% (*n* = 13) Asian American, 8.5% (*n* = 13) Hispanic, 5.88% (*n* = 9) Multiracial, 1.31% (*n* = 2) Other Ethnicity/Race, and less than 1% (*n* = 1) Native American. Female students represented 71.90% (*n* = 110) of the sample followed by 26.80% (*n* = 41) males, and 1.31% (*n* = 2) non-binary. More than ninety percent (*n* = 139) of the participants were enrolled at a public (4-year) institution followed by 5.88% (*n* = 9) community college, and 3.27% (*n* = 5) were enrolled in a private institution. Response rate was less than one percent with 154 participants out of the 24,000 students sent the survey.

Participants were also asked to report the high school setting in which they graduated. The sample consisted of 62.75% (*n* = 96) graduating from a suburban school, followed by 19.61% (*n* = 30) graduating from an urban school, and 17.65% (*n* = 27) graduating from a rural school. Academically, the participants varied in reported grade point average (GPA). Approximately 12% (*n* = 19) of the sample reported a GPA of 4.0 or higher, 63% (*n* = 96) of the participants reported a GPA of 3.00-3.99 followed by 13.73% (*n* = 21) with 2.0-2.99, 9.15% (*n* = 14) with Unknown, and 1.96% (*n* = 3) with a reported GPA. of 1.99 or lower. The participants also indicated how often they utilized

their school counselor for academic or career support in their senior year. A little less than 44% (*n* = 67) reported utilizing their school counselor 1-3 times, followed by 26.14% (*n* = 40) 4-6 times, 11.11% (*n* = 17) more than 10 times, and 5.23% (*n* = 8) reported utilizing their school counselor 7-9 times their senior year. Additionally, 13.73% (*n* = 21) indicated that they did not utilize their school counselor at all for either academic or career support their senior year.

Research Design

For the purposes of this quantitative study, the goal was to investigate college students' self-efficacy as it relates to career and college readiness. Using a previously established survey instrument, descriptive statistics were computed on all survey items, and analyses were performed using SPSS Statistics Version 25 to determine possible differences between the variables in each research question. The significance level was set at .05 or lower, and power was .80 or higher as a mechanism to prevent Type II errors (Garson, 2012). Based on the characteristics of probability sampling and G power analysis, the total sample size was sufficient for proper analysis.

Results

Preparedness to Succeed in Post-Secondary Education

The CCRSI includes four different factors: (a) procedural and financial challenges, (b) positive personal characteristics, (c) academic competence, and (d) potential to achieve future goals. The responses from the participants were analyzed using descriptive statistics and a 5 x 3 between-subjects analysis of variance to determine overall scores for the complete instrument and scores for each of the four factors (Table A2).

Total Scores

The data analysis of total self-efficacy scores in relation to student race and high school setting did not indicate statistically significant results, $F(4, 139) = 1.918$, $p = .111$, $\eta^2 = .052$ and $F(2, 139) = 2.366$, $p = .098$, $\eta^2 = .033$, respectively. However, further analysis was performed on each factor of the self-readiness scale, examining the differences between student race and high school setting for each of the four factors.

Factor 1

Factor 1 includes procedural and financial challenges. The data analysis did not indicate statistically significant results between student race or high school setting within factor one of the self-readiness scale, $F(4, 139) = 1.776$, $p = .137$, $\eta^2 = .049$, $F(2, 139) = 1.039$, $p = .357$, $\eta^2 = .015$., respectively. Although statistically significant results were not found, the estimated marginal means profile plot indicates lower self-efficacy scores regarding procedural and financial challenges with both Asian American and Hispanic students, especially within rural and suburban school settings.

Factor 2

Factor 2 examines the self-readiness of positive personal characteristics. Although high school setting did not indicate any statistically significant results, $F(2,139) = 2.997$, $p = .053$, $\eta^2 = .041$, the data analysis did determine statistically significant results for student race, $F(4,139) = 4.666$, $p = .001$, $\eta^2 = .118$. To find the pattern of difference, a post hoc comparison was performed using Tukey's honestly significant difference (HSD) procedure. The results indicated that Black students scored 2.46 points higher on positive personal characteristics than Asian American, $p = .009$. White students scored 2.15 points higher on their self-efficacy than Asian American

students, p = .007. Hispanic students scored also scored .82 points higher than Asian American students, p = .028.

Factor 3

Factor 3 consisted of questions related to academic competence. Although student race was not statistically significant, $F(4,139) = .702$, p = .592, η^2 = .0920, high school setting did indicate significant results, $F(2,139) = 4.359$, p = .015, η^2 = .059. The least significant difference (LSD) post-hoc procedure was performed, and the results indicated that students from rural schools scored .197 points lower on their academic competence self-efficacy than students from a suburban school, p = .013, and those students also scored .222 points lower than students from urban schools, p = .002. There was no statistical difference in academic competence self-efficacy scores between suburban and urban students, p = .286.

Factor 4

The final factor, potential to achieve future goals, did not indicate any statistically significant results for race, $F(4,139) = 1.814$, p = .130, η^2 = .050 or high school setting, $F(2,139) = 1.086$, p = .340, η^2 = .015.

Impact of School Counselor Visits on Readiness

Performing an ANOVA on total self-efficacy scores and the number of counselor visits did not indicate any statistically significant results, $F(1,151) = .590$, p = .445, η^2 = .004. There was no difference in total self-efficacy scores between students who either saw their school counselor less than four times or more than four times during their senior year.

Discussion

Most jobs in the United States require a post-secondary education (Dyce et al., 2013; Martinez et al., 2016). Given this fact, more high-school graduates will need to not only graduate high school and attend college but will need to successfully earn degrees to gain employment. An increase in self-efficacy, or the belief in one's ability to successfully and competently complete a task (Bandura, 1977, 1994, 1999), is tied to an increase in sustained effort to accomplish a task (Bandura, 1977, 1994). Therefore, post-secondary students' self-efficacy is an area that should be closely examined to assure that students can complete their undergraduate education and matriculate into the workforce.

The purpose of this study was to explore high school graduates' post-secondary self-efficacy in relation to student race and high school setting. Additionally, the researchers examined the impact of school counselor visits on college and career self-readiness among college students. Regarding overall self-efficacy scores, the analysis results for student race and high school setting were not statistically significant. When examining each factor of college and career readiness self-efficacy (i.e., procedural and financial challenges, positive personal characteristics, academic competence, and potential to achieve future goals), some factors were statistically significant.

Regarding Factor 2, self-readiness of positive personal characteristics (i.e., possession of positive personal characteristics that will enhance readiness), Asian American students scored lower in this area than Black, White, and Hispanic students. It is important to note that some research indicates school counselors lack confidence when attending to race/ethnicity issues in career counseling (Sanders et al., 2017).

Although the results do not demonstrate that Asian Americans score lower because of school counselors' multicultural competence directly, it is still important that school counselors focus on Asian American students, especially on ways to promote positive personal characteristics among this population.

Regarding Factor 3, high school setting revealed statistically significant results, indicating that students from rural schools scored lower on their academic competence self-efficacy than students from suburban or urban schools. This finding is not surprising, given that rural students may have access to fewer resources (Fan & Chen, 1999), lower aspirations in relation to their education and career attainment (Griffin et al., 2011), and score deficits (when compared to Urban students) on college entrance exams (Herman et al., 2013). School counselors in rural settings may need to use targeted interventions focused on increasing academic competence self-efficacy.

Finally, the results of this research indicated that the number of times college students reported visiting their high school counselor during their senior year of high school did not impact their overall college and career-readiness. Previous research indicates an association between comprehensive school counseling programs and increased college and career motivation (Laplan et al., 2012). The results of the current research, when considered with Laplan and colleagues' findings, may suggest that student experiences with the comprehensive services of a school counseling program have a greater impact on students' college and career readiness than individual student visits with the school counselor.

Implications

The results of the research study provide several implications for school counselors and counselor educators. For school counselors in rural areas, finding innovative ways to bring awareness to post-secondary options is critical. Because students from rural schools may have additional obstacles accessing college and career resources, school counselors may need to dedicate extra time or effort within their school counseling comprehensive program to emphasize post-secondary resources and information. Offering workshops, programs, or events during the school day may help those students who do not have transportation before or after school for college readiness workshops or financial aid nights. Additionally, school counselors can collaborate with other staff members, like English and Math teachers, or local community members to offer ACT or SAT workshops for students who are preparing to take college entrance exams but may need help developing test-taking strategies.

The findings of the research indicate lower self-efficacy scores related to self-readiness of positive personal characteristics for Asian Americans more than any other racial or ethnic group. It is important to draw attention to the model minority myth, which upholds the stereotype that Asian American children can achieve a higher level of success than the general population (Blackburn, 2019; Wong et al., 1998). This notion suggests that Asian Americans should innately be good in school, hardworking, and self-sufficient. The model minority myth is often used to compare Asian Americans to all other groups, especially for other minority group members (Wong et al., 1998). School counselors must be cognizant of their biases and understand the impact of the minority model myth. For Asian American students who are not high performing, students may

struggle with the divide between their academic abilities and what is expected of them because of this myth, leading to feelings of self-doubt or inadequacy. For Asian American students who are academically successful, they may find it overwhelming to maintain this stereotype, living in a state of fear of what might happen if they do not fulfill the societal expectations placed upon them. School counselors should not only understand the impact of the minority model myth, but also provide direct and indirect services specifically to Asian Americans that help them develop and practice positive personal characteristics. It is also important that school counselors are aware of their own stereotypes and engage in college and career counseling that does not promote the harmful effects of the minority model myth.

Limitations

As with all research studies, there are a few limitations related to this study. First, the CCRSI is self-report measure and responses could be influenced by social desirability. Second, the participants in the study were recruited from the Southeast region of the country, which limits generalizability. Because participants were recruited through university listserv, this also limits generalizability as a certain type of participant may have been more likely to respond to a survey email than another. It would be beneficial if future researchers used methods to increase generalizability and examined additional regions of the United States. An additional limitation regarding recruitment and participation is the low response rate. Bech and Kirstensen (2009) acknowledged that Web-based surveys typically deliver lower response rates than other data collection methods.

To minimize social desirability, future researchers could also utilize a qualitative approach to understand the college and career readiness of recent high school graduates. Additionally, the second research question examined the number of individual school counselor visits in relation to student self-efficacy score. This assumes that the number of visits is a realistic indicator of the utility of the school counselor, which is debatable. In future studies, it would be worth asking participants directly if they felt that their school counselor positively affected their level of preparation and self-efficacy related to college.

Conclusion

The purpose of this study was to examine career and college readiness self-efficacy of college students. The results of this study indicated that Asian students reported lower scores on positive personal characteristics. It is important for school counselors to provide socio-emotional support to Asian students even though they may seem successful in academic performance and college attainment. Furthermore, this study found that rural students reported lower self-academic competence. School counselor preparation programs and current practitioners should consider how college and career readiness training includes strategies specific to this population. Although most of the findings from this study appear to be statistically nonsignificant, these results are mixed compared to previous studies. Therefore, additional research needs to explore the effectiveness of strategies that will help students become more career and college ready.

References

American College Testing. (2016). The condition of college and career readiness 2016. *The ACT college readiness assessment.* http://act.org

American School Counselor Association (2019). *ASCA School Counselor Professional Standards & Competencies*.

American School Counselor Association (2014). *Mindsets and behaviors for student success: K-12 college and career readiness standards for every student.*

Baker, S. B. (2019). Understanding and enhancing career and college readiness self-efficacy: Evidence-based practice. *National Career Development Association Career Convergence Magazine.* https://www.ncda.org/aws/NCDA/pt/sd/news_article/245174/_PARENT/CC_layout_details/false

Baker, S. B., Parikh-Foxx, S., Akcan-Aydin, P., Williams, R. G., Ashraf, A., & Martinez, R. R. (2017). Psychometric properties of the Career and College Readiness Self-Efficacy Inventory. *Ideas and Research You Can Use: VISTAS 2017, 31,* 1-13.

Baker, S. B., & Parikh-Foxx, S. (2012). *Career and College Readiness Self-Efficacy Inventory*. North Carolina State University.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1994). *Self-efficacy.* In V. S. Ramachaudran (Ed.). *Encyclopedia of Human Behavior*, (pp.71-81). Academic Press.

Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology, 2*, 21-41.

Bech, M., & Kristensen, M. B. (2009). Differential response rates in postal and web-based surveys in older respondents. *Journal of the European Survey Research Association, 3*, 1-6. https://doi.org/10.18148/sm/2009.v3i1.592

Blackburn, S. (2019). What is the model minority myth? *Teaching Tolerance*. https://www.tolerance.org/magazine/what-is-the-model-minority-myth

Bonner, S. M., & Thomas, A. S. (2017). The effect of providing instructional facilitation on student college readiness. *Instructional Science, 45*, 769-787. https://doi.org/10.1007/s112510179426-0

Camara, W. (2013). Defining and measuring college and career readiness: A validation framework. *Education Measurement: Issues and Practice, 32*, 16-27. https://doi.org/10.1111/emip.12016

Conley, D. T., & French, E. M. (2014). Student ownership of learning as a key component of college readiness. *Journal of American Behavioral Scientist, 58*, 1018-1034. https://doi.org/10.1177/0002764213515232

Duncheon, J., & Tierney, W. G. (2014). Examining college writing readiness. *The Education Forum, 78*, 210-230. https://doi.org/10.1080/00131725.2014.912712

Dyce, C. M., Albold, C., & Long, D. (2013). Moving from college aspiration to attainment: Learning from one college access program. *The High School Journal*, *96*(2), 152-165.

Fan, X., & Chen, M. J. (1999). Academic achievement of rural school students: A multi-year comparison with their peers in suburban and urban schools. *Journal of Research in Rural Education 15*, 1, 31-46.

Feller, R. (2014). College and career readiness for learners of all ages. *NCDA Career Developments, 30*, 5-9.

Francis, G. L., Duke, J., Brigham, F. J., & Demetro, K. (2018). Student perceptions of college-readiness, college services and supports, and family involvement in college: An exploratory study. *Journal of Autism and Developmental Disorders, 48,* 3573-3585. https://doi.org/10.1007/s10803-018-3622-x

Garson, G. D. (2012). *Power analysis*. Statistical Associates Publishers.

Gliem, J. A., & Gliem, R. R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for likert-type scales*. Paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University.

Griffin, D., Hutchins, B. C., & Meece, J. L. (2011). Where do rural high school students go to find information about their futures? *Journal of Counseling and Development, 89*, 172-181.

Henry, L. A., & Stahl, N. A. (2017). Dismantling the developmental education pipeline: Potent pedagogies and promising practices that address the college readiness gap. *Journal of Adolescent and Adult Literacy, 60*, 611-616. https://doi.org/10.1002/jaal.640

Herman, M. V., Huffman, R. E., Anderson, K. E., & Golden, J. B. (2013). College entrance examination score deficits in ag-intensive, rural, socioeconomically distressed North Carolina counties: An inherent risk to the post-secondary degree attainment for rural high school students. *NACTA Journal, 57*, 45-50.

Hines, P. L., Lemons, R. W., & Crews, K. (2011). Poised to lead: How school counselors can drive college and career readiness. K-12 Practice. *Education Trust*. http://www.edtrust.org/dc/publication/poised-to-lead

Lapan, R. T., Whitcomb, S. A., & Aleman, N. M. (2012). Connecticut professional school counselors: College and career counseling services and smaller ratios benefit students. *Professional School Counseling, 16*, 117-124.

Le, V. N., Mariano, L. T., & Faxon-Mills, S. (2016). Can college outreach programs improve college readiness? The case of the college bound, St. Louis program. *Research in Higher Education, 57,* 261-287. https://doi.org/10.1007/s11162-015-9385-8

Malin, J., Bragg, D., & Hackmann, D. (2017). College and career readiness and the Every Student Succeeds Act. *Educational Administration Quarterly*, *53*, 809-838. https://doi.org/10.1177/0013161X17714845

Martinez, R. R, Baker, S. B., & Young, T. (2016). Promoting career and college readiness, aspirations, and self-efficacy: Curriculum field test. *The Career Development Quarterly, 65*, 173-188.

Morgan, L. W., Greenwaldt, M. E., & Gosselin, K. P. (2014). School counselors' perceptions of competency in career counseling. *The Professional Counselor, 4*, 481-496. https://doi.org/10.15241/lwm.4.5.481

Mullen, P. R., & Lambie, G. W. (2016). The contribution of school counselors' self-efficacy to their programmatic service delivery. *Psychology in the Schools, 53*, 306-320.

Powers, P., & Boes, S. R. (2013). Steps toward understanding: Teacher perceptions of the school counselor role. *Georgia School Counselors Association Journal*, *20*, 1-8. https://files.eric.ed.gov/fulltext/EJ1072615.pdf

Pulliam, N., & Bartek, S. (2018). College and career readiness in elementary schools. *International Electronic Journal of Elementary Education*, *10*, 355-360. https://doi.org/10.26822/iejee.2018336193

Royster, P., Gross, J., & Hochbein, C. (2015). Timing is everything: Getting students back on track to college readiness in high school. *The High School Journal, 98*, 208-225.

Sanders, C., Welfare, L. E., & Culver, S. (2017). Career counseling in middle schools: A study of school counselor self-efficacy. *The Professional Counselor, 7*, 238-250. https://doi.org/10.15241/cs.7.3.238

Stone-Johnson, C. (2015). Counselors as policy actors: Challenges to systemic involvement in college and career readiness policy in secondary schools. *American Secondary Education*, *43*, 27-43.

Tang, M., Pan, W., & Newmeyer, M. (2008). Factors influencing high school students' career aspirations. *Professional School Counseling, 11*, 285-295. https://doi.org/10.1177/2156759X0801100502

Tierney, W. G., & Sablan, J. R. (2014). Examining college readiness. *American Behavioral Scientist, 58*, 943-946. https://doi.org/10.1177/0002764213515228

U.S. Census. (2018). *Classrooms more racially and ethnically diverse*. https://www.census.gov/newsroom/press-releases/2018/school-enrollment.html

Wilson, D., & Lowry, K. M. (2017). One goal, two institutions: How a community college and 4-year university partner to bridge student college readiness gaps, community college. *Journal of Research and Practice, 41*, 267-272. https://doi.org/10.1080/10668926.2016.1251350

Wong, P., Lai, C. F., Nagasawa, R., & Lin, T. (1998). Asian Americans as a model minority: Self-perceptions and perceptions by other racial groups. *Sociological Perspectives, 41*, 95-118. https://doi.org/10.2307/1389355

Appendix A

Table A1

Participant Demographics

Demographics	*N*	%
Race		
Black/African American	23	15
Asian American	13	8.50
White	92	60
Hispanic	9	5.88
Multiracial	2	1.31
Native American	1	1
Other Ethnicity/Race	1	1
Chose Not to Answer	11	7.31
Self-Identified Gender		
Female	110	71.90
Male	41	26.80
Non-Binary	2	1.31
University Type		
Public (4-year)	139	90
Private (4-year)	9	5.8
Community College (2-year)	5	3.2
High School Setting		
Rural	27	17.6
Suburban	96	62.7
Urban	30	19.6
High School GPA		
4.0 or Higher	19	12
3.0-3.99	96	63
2.0-2.99	21	13.7
1.99 or Lower	14	9.1
Unknown	3	1.9
School Counselor Visits		
0 Times	21	13.7
1-3 Times	67	44
4-6 Times	40	26.1
7-9 Times	8	13.7
More than 10 Times	17	5.2

Table A2

Self-Efficacy Factors

Self-Efficacy Score	Category	MS	*F*	*p*	η^2
Factor 1	Student Race	23.402	1.776	.137	.049
	High School Setting	13.683	1.039	.357	.015
Factor 2	Student Race	20.793	4.666	*.001	.118
	High School Setting	13.354	2.997	.053	.041
Factor 3	Student Race	2.948	.702	.592	.020
	High School Setting	18.296	4.359	*.015	.059
Factor 4	Student Race	1.131	1.814	.130	.050
	High School Setting	.677	1.086	.340	.015
Total	Student Race	80.257	1.918	.111	.052
	High School Setting	98.974	2.366	.098	.033
	School Counselor Visits (Less than 4)	25.971	.585	.445	.004
	School Counselor Visits (More than 4)	26.160	.590	.444	.004

*$*p < .05$.