High School Counselor Contacts as Predictors of College Enrollment

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Based on archival data from an urban school district, this retrospective correlational study examined the extent to which certain types of student–school counselor contacts, based on a student-report high school exit survey, could predict high school students' postsecondary enrollment in 2- and 4-year colleges within 5 years of graduating from high school. In addition to these variables, information such as ethnicity, grade point average, and free and reduced lunch status were used to identify other trends in the data. Multiple logistic regression analysis showed that counselor contact regarding college planning and attendance and demographic information regarding free and reduced lunch status were significant predictors of postsecondary enrollment. Counselor contact regarding goal setting, concerns about grades, and needing more college information did not significantly predict postsecondary college enrollment. Findings suggest some school counselor duties can serve as sources of social capital, which can help increase student social capital.

Keywords: school counselor, postsecondary college enrollment, reduced lunch, free lunch, social capital

According to the American School Counselor Association (ASCA; 2012), the role of school counselors is to remove barriers to academic success through establishing a comprehensive counseling program and providing appropriate services. This includes, but is not limited to, developing and imparting counseling curriculum based on school need, intentional guidance lessons, connecting with other stakeholders, planning, and counseling students at all levels. Through these various functions, school counselors interact with and impact students they serve. Statewide studies focusing on school counseling programs have found that comprehensive school counseling programs assisted in increasing test scores, improving student grades, lowering suspension rates, and increasing feelings of school connectedness (Carey, Harrington, Martin, & Hoffman, 2012; Carey, Harrington, Martin, & Stevenson, 2012; Lapan, Gysbers, & Petroski, 2001; Lapan, Gysbers, & Sun, 1997).

According to the National Center for Education Statistics (NCES), only 66.2% of graduating high school students enrolled in a 2-year or 4-year college in Fall 2012 (NCES, 2015a, row 52). Recently, there have been increased efforts to matriculate students to higher education after high school as national attention focuses on the United States' post-industrial society and its effects on enrollment (Clinedinst & Koranteng, 2017; Hill, 2012; NCES, 2015b). Former First Lady Michelle Obama launched the Reach Higher Initiative (n.d.), which introduced the idea of a national signing day to encourage and inspire all students, especially low-income and first-generation students, to attend college. Some key individuals who are primed to support all students in the transition from high school to postsecondary education, especially for lower socioeconomic status and minority populations, are high school counselors (Holcomb-McCoy, 2010). Elementary and middle school counselors play a crucial role in preparing students for high school, yet high school counselors are held the most responsible for ensuring students' successful transitions to life after high school (Carey & Dimmitt, 2012). Through the present study, we sought to add to the literature by examining the extent to which school counseling contacts predict high school students' postsecondary enrollment. We believe that such focus will help school counselors self-advocate for duties that support successful postsecondary enrollment.

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Roles, Responsibilities, and Challenges of a High School Counselor

High school counselors, while meeting academic, career, personal, and social student needs, also play a crucial role in ensuring their students are on track for high school graduation, assisting in college applications, and filling out financial aid applications, especially for first-generation and marginalized students who rely more heavily on school counselors to complete the process (Lapan, 2012; Martinez, 2013; McDonough, 2005). Though increasing college and career services is a current focus in K–12 education, frequently, the college and career services that school counselors wish to provide are at odds with administration and school districts' work expectations and emphasis for school counselors (Carey, Harrington, Martin, & Hoffman, 2012; Paolini & Topdemir, 2013). Instead of being able to wholly focus on providing personal, social, and college and career services, school counselors are oftentimes saddled with administrative tasks such as entering transcripts, grade verifications, and test proctoring. This has led to an internal push in the school counseling profession to provide data to support the positive impact school counselors have on their students (Brigman & Campbell, 2003; Hurwitz & Howell, 2014).

Impact of School Counselor Interventions on Postsecondary Outcomes

Most studies related to high school counseling have focused specifically on how school counselor caseload size influences school counseling duty outcomes. Whether it was assisting with college applications (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011), spending more than half their time on college-related topics (Engberg & Gilbert, 2014), increased opportunity for individual planning (Woods & Domina, 2014), or higher rates of 4-year college enrollment (Hurwitz & Howell, 2014), smaller school counselor caseloads were demonstrated to positively influence students' postsecondary plans. One study specifically examined first-generation and low-income students. Pham and Keenan (2011) found that the lower the first-generation student–counselor ratio, the higher the likelihood that a qualified first-generation student would enroll in a 4-year university. This finding corroborates existing findings that show first-generation and low-income students tend to rely more heavily on school-provided services, and the degree to which school counselor support can improve student access to higher education. Belasco (2013) highlighted the association between school counselor meetings with students and subsequent postsecondary enrollment; however, the study only examined the first fall after high school graduation and excluded enrollment in 2-year institutions in the analysis.

The abovementioned studies support the argument that school counselors contribute to students accessing postsecondary planning and support. Specifically, findings in the studies indicate that specific contacts with school counselors contribute to students' 4-year college postsecondary enrollment. With that said, despite the literature that supports school counseling and highlights the extent to which school counselors can positively impact students, there has been a lack of conversation regarding which specific counselor contacts may contribute most to postsecondary enrollment, as well as enrollment in both 2- and 4-year institutions (NCES, 2005). Thus, it is crucial to examine what exact contacts school counselors have with students that potentially influence student postsecondary enrollment in order to advocate for more time to do those activities.

Purpose of the Study

The focus of this study was to examine specific school counseling contacts and their influence on students' postsecondary enrollment. Specifically, we wanted to know whether students' contacts with school counselors influence students into matriculating to higher education. We hoped to fill a gap in the research by examining specific counselor contacts that support student achievement, in addition to

expanding the examined postsecondary institution enrollment window beyond the fall immediately following graduation. The ultimate goal is that our findings will provide information to the profession and its advocates, such as ASCA, to assist with their advocacy efforts and policy recommendations.

Based on the gaps in the existing research, the primary research question that guided our study was: To what extent do the following student–school counselor contacts, as reported by graduating high school students, predict postsecondary institution enrollment (2- and 4-year inclusive): (1) contact related to attendance, (2) contact related to college planning/scholarship support, (3) contact related to concerns about grades, and (4) contact related to goal setting?

The secondary research question was: To what extent do culminating GPA in high school, free and reduced lunch (FRL) status, and a student's ethnicity predict enrollment in a postsecondary institution (2- or 4-year inclusive)? In addition to the above student–school counselor contact variables, we included a predictor variable that assessed students' perception of the college search and application process. This data came from student responses to the survey question: Were there parts of the college search and/or application process you felt you needed more assistance or information?

Method

Design

The present study was a retrospective study that used binary multiple logistic regression to analyze an archival dataset. The central data was high school students' reported contacts with their school counselors as related to subsequent college enrollment.

Two types of data were collected for each student. The first type was data regarding students' contacts with counselors while in high school. This data was drawn from a district database, which was comprised of data from 17 high schools. The data came from a Senior Exit Survey (required of all 12th-grade students) and general background information (GPA, FRL status, and ethnicity). The second type was data regarding student enrollment in a postsecondary course of study. This data was drawn from the National Student Clearinghouse (NSCH; n.d.) to ascertain if students enrolled in a 2- or 4-year college in any of the 5 years following graduation.

District Information

The school district studied is a large urban school district in a Western state in the United States. As an urban district, it encompasses both suburban and urban areas and at the time of this study, the total K–12 enrollment was 79,423. The district follows the ASCA National Model (ASCA, 2012) and encourages comprehensive school counseling program implementation at each site.

Participants

The target population studied was the 2,276 12th-grade students who were slated to graduate. We selected this cohort in order to include 5 years of postgraduate data regarding whether they enrolled or did not enroll in 2- or 4-year postsecondary institutions. Of the 2,276 students, 67 were excluded because of missing information necessary for the study. The final 2,209 in the study sample consisted of 0.04% Hawaiian/Pacific Islander, 0.09% Native American, 0.09% two or more races, 3.9% Asian, 20% African American/Black, 30% White, and 47.5% Hispanic/Latinx. This breakdown is representative of the district at large. Of the sample used, 1,181 (53%) students qualified for FRL, while 1,028 (47%) did not qualify.

Because of the small number (n = 19) of Native American, Hawaiian/Pacific Islander, and "two or more race" students, we did not use these ethnicities in our regression model. Representing all students is crucial in school counseling; however, with such small sample sizes, it might make the students personally identifiable (NCES, 2017). The Every Student Succeeds Act (ESSA) also has guidelines regarding minimum numbers of n-size requirements to make statistical inferences in state accountability systems, and 19 did not make the minimum (Alliance for Excellent Education, 2018).

Measures

Senior Exit Survey. This school district administers its Senior Exit Survey to each senior every school year between May 15 and June 15. The purpose of the survey is to assess the types of support services students accessed during their high school careers. The survey includes questions that directly answered the research questions posed for this study: whether students had met with their school counselor about (a) attendance; (b) college planning, applications, essays, and scholarships; (c) concerns about grades; and (d) goal setting (all responses coded as 0 for not met, and 1 for met). The survey also included a question that asked students, "Were there parts of the college search and/or application process you felt you needed more assistance or information?" We incorporated responses to this survey question into the current study as an additional predictor variable because we wanted to examine if the perception of needing more assistance resulted in students not enrolling in either a 2- or 4-year college (all responses coded as 0 for not attended, and 1 for attended).

National Student Clearinghouse data. NSCH data is collected from over 3,600 colleges and universities, both private and public. Membership in the Clearinghouse is open to any postsecondary institution that participates in the Federal Title IV program. The data includes degrees obtained and enrollment in postsecondary institutions (NSCH, n.d.). The specific information used as the outcome variable in our study was if students enrolled in a 2- or 4-year postsecondary institution at least once in the 5 years after graduating from high school (coded as 1 for yes, or 0 for no). We used the 5-year time frame because not all students enroll immediately in college upon graduation, and we wished to capture students who enrolled later (NCES, 2005; Rowan-Kenyon, 2007).

District data. Student data that has been known to reflect achievement and postsecondary enrollment were provided by the district as well. District data included in the data analysis was: (a) ethnicity, (b) GPA, and (c) FRL status.

Data Construction and Analysis

A de-identified dataset was obtained from the school district's research department after receiving a research proposal. As the dataset was de-identified and had already been collected, the university IRB committee determined that an IRB application for human subjects was not required. A multiple logistic regression was performed, with binary and scale variables, using SPSS Statistics 22.0 to examine whether the set of school counseling duties (dependent variables) are statistically significant in predicting 2- or 4-year institution enrollment (independent variable). In addition to these, background supplemental independent predictor variables were included to assess their relative contribution to the outcome response. School counseling duties, FRL status, and ethnicity were coded as binary variables, and GPA was coded as a scale (A = 4, B = 3, C = 2, D = 1, F = 0).

Some data was recoded in order to condense some of the information. One piece of the dataset that was recoded was the NSCH data. As there were 5 years of postsecondary enrollment data, it was condensed and recoded to create one variable that indicated if the individual had been enrolled (yes or no) in a postsecondary institution, either 2- or 4-year, during those 5 years.

In order to ascertain the number of participants required to make for a robust study, G*Power (Heinrich, 2014) was used. According to the information, 89 individuals are the minimum number of participants required to ensure the results had enough power, and our sample size far exceeded the minimum requirement. In order to reduce the possibility of a Type II error, we used an alpha level of .05 to determine statistical significance.

Results

School Counselor Contacts

Multiple logistic regression was conducted to determine which dependent variables of school counselor contact (i.e., attendance, college planning, concerns about grades, goal setting) and demographic variables (i.e., FRL status, GPA, ethnicity, and perception of needed additional assistance with college topics) were statistically significant predictors of enrollment at least once in a 2- or 4-year postsecondary institution. Regression results indicated the overall model of eight predictors: four dependent variables (meeting with school counselors about college planning, concerns about grades, attendance, and goal setting) and four demographic variables (FRL status, GPA, ethnicity, and perception of needing more assistance with college-related topics). The model of eight predictors was statistically reliable in distinguishing between students who did not enroll in postsecondary institutions and those who did. The Nagelkerke R^2 = .262 (p < .0001) indicated that the predictor variables accounted for about 26% of the variability in student outcomes. The Hosmer and Lemeshow test indicated the goodness-of-fit (p = .381, X^2 = 8.559). Significance levels and odds ratios are presented in Table 1.

Table 1 Logistic Regression Analysis Predicting Postsecondary Enrollment at Least Once (N = 2,209)

	Sig.	Exp(B)	
Weighted GPA	.000	2.222	
FRL Status (1)	.021	.771	
College Planning (1)	.000	1.436	
Concerns About Grades (1)	.659	1.049	
Goal Setting (1)	.687	.754	
Attendance	.000	.577	
Needing More Assistance? (1)	.772	1.029	
Ethnicity			
White	.873	.924	
Black	.093	2.308	
Asian	.591	1.354	
Hispanic/Latinx	.305	.605	
Constant	.001	.183	

Note. FRL = Free and reduced lunch; Needing More Assistance? = Were there parts of the college search and/or application process you felt you needed more assistance or information?; (1) = Student met with school counselor for indicated contact type, qualified for FRL, and/or felt they needed more assistance/information.

Of the variables, four did not have significant group differences: ethnicity, concerns about grades, goal setting, and perceptions of further need regarding postsecondary topics. But, FRL status, GPA, college planning contact, and attendance contact with school counselors all had significant group

differences as to whether a student enrolled at least once in a postsecondary institution or not within 5 years of high school graduation. Specifically, students who participated in FRL programs were 22.9% less likely than those who did not participate in those programs to attend either a 2- or 4-year college. Students who met with their school counselor regarding attendance were 24.6% less likely to attend a postsecondary institution during the same time frame. The odds for students with higher GPAs (95% CIs [1.93, 2.55]) to enroll in a postsecondary institution at least once were 122% higher than for those with lower GPAs. The likelihood for students to attend a 2- or 4-year postsecondary institution at least once in the 5 years post-graduation was 43.6% higher for those who met with their school counselor concerning college planning than for those who did not.

Based on the variables, the analysis also predicted if a student would enroll in a postsecondary institution within 5 years of high school graduation. The model classified 69.8% of the cases correctly regarding if a student enrolled at least once in a postsecondary institution based on the variables introduced in our study.

Interesting information regarding postsecondary enrollment and GPA was uncovered during the data analysis portion of this process (see Table 2). There were a significant number of students who did not enroll in postsecondary institutions despite having above a 3.0 GPA. In addition to this, there were significantly more students who had a GPA between 2.0 and 3.0 who did not enroll in a postsecondary institution, even though their grades were more than sufficient to do so. It is possible that the students who had qualifying GPAs but did not appear to attend a college may have attended one that did not participate in National Clearinghouse data collection. It also is possible that students who participated in special education non-college classes artificially inflated the number of students with high GPAs.

Table 2

Variables and Average GPA

		Weighted GPA Mean
Attendance	Did Not Meet About Attendance Met About Attendance	3.07 2.34
College Planning	Did Not Meet for College Planning Met for College Planning	2.63 3.06
FRL Status	Not FRL FRL	3.24 2.55
Enrolled at Least Once	Not Enrolled Enrolled	2.45 3.15

Note. FRL = Free and reduced lunch.

Discussion

It is not surprising that findings in this study support extant findings that suggest school counselor interventions positively impact student-related outcomes and constitute a source of student social capital (Bryan et al., 2011). *Social capital* can be defined as relationships and influencing connections that individuals have with others and the system in which they live (Coleman, 1988). In this context, our findings have important implications for school counselors, school administrators, and legislators. Additionally, the results also contribute much needed data to the existing literature examining strategic school counseling interventions and accountability in assisting students with matriculating to higher education.

This study supported previous findings about the influence of socioeconomic status and school-provided support in assisting students to enroll in postsecondary institutions (Martinez, 2013; Stanton-Salazar & Dornbusch, 1995). Findings indicate that students in this school district who met with their counselors for college planning were 1.4 times more likely to enroll in postsecondary institutions within 5 years of graduating high school compared to students who did not. It is reasonable to think that students who consult with their counselors for college planning have already decided they will attend a postsecondary institution; however, it is also reasonable to think that contact with counselors in relation to college planning might have encouraged some students who were not as motivated or resourceful to pursue postsecondary education. Regardless of students' postsecondary institution intentions before school counselor contact, the fact that there is opportunity to discuss college-related information is beneficial. Either way, this finding can support the argument that school counselors need sufficient time to provide college-related services for students, which can impact their postsecondary enrollment.

This study further highlights that students who met with their school counselors regarding attendance were 24.6% less likely than their peers to attend a postsecondary institution within 5 years of graduating high school. It is within reason to expect that students who meet with their counselor regarding attendance are generally doing so because attendance is an issue that puts them in the "atrisk" category. This highlights the fact that students who miss school may be less engaged or have other personal and social factors occurring in their lives that hinder school performance and consequently derail them from pursuing a postsecondary college education. This information highlights the topics of prevention and intervention, both of which school counselors can and are expected to provide. However, with large caseloads and assigned duties outside of what ASCA specifies as appropriate for school counselors, they are unlikely to be able to provide adequate attention and intervention for students in need (McKillip, Rawls, & Barry, 2012). As such, this information can be useful in advocating for more time dedicated to the intentional interventions needed.

The other variables examined were goal setting, GPA, concerns about grades, ethnicity, and perceptions of needing more assistance with college-related items. None of these variables statistically predicted postsecondary enrollment. It is possible that because there are many different areas of goal setting, not just postsecondary goal setting, there was no correlation found. The same can be said for contact with school counselors regarding concerns about grades. It was interesting that the perception of needing more assistance with college-related items did not predict postsecondary enrollment. One reason might be that because it is a confusing process, even if students needed more assistance, it is possible they had already completed the correct steps for enrollment. Though ethnicity was not found to be statistically significant during post-hoc analysis, interesting patterns were observed.

Latinx students were much less likely to attend a postsecondary institution at least once, even though they did not meet with their school counselor at different rates than their peers (Stanton-Salazar & Dornbusch, 1995). This leads to discussion regarding specific school counselor interventions with Latinx students and their families. School counselors can be sources of social capital and more information is needed to identify school-based interventions that may successfully assist more Latinx students to enroll in postsecondary institutions.

Curiously, the mean GPAs of students who did not meet with school counselors regarding attendance and college planning, although they were lower than students who did meet, were still high enough to apply to 4-year colleges, and students would thus also have the opportunity to enroll in a 2-year institution. The same pattern was noticed between students who qualified for FRL and those who did not, and those who enrolled and those who did not. Although those who did qualify for FRL and those who did not enroll had an overall lower mean GPA, both groups still would have qualified for a 4-year institution based on mean GPAs. This leads to a discussion regarding successful school counseling interventions that can target students who qualify but do not enroll (Bozick & DeLuca, 2005; Kim, 2012; NCE, 2005; Pham & Keenan, 2011).

Overall, the data and the analyses supported the desired goal of this research study. In examining the variables, we were able to find supporting evidence that certain student–school counselor contacts had a statistically significant relationship to the students' subsequent enrollment in a 2- or 4-year institution within 5 years of high school graduation. We also inadvertently discovered data that supports further research into tiered intentional interventions for students who qualify for postsecondary options but choose not to attend. Although this study highlights how school counselors are well-positioned to provide postsecondary preparation services and how students can benefit, we also hope it informs professional practice as an advocacy tool and in areas for subsequent research.

Limitations

It must be noted that our results are only representative of the individuals who took the Senior Exit Survey in the study sample. The results from this study cannot be directly generalized to other districts, as this district produces its own required core curriculum lessons in addition to its own exit survey. Though the number of participants is much larger than required by G*Power, there are advantages to this, as the study has the ability to detect smaller differences than if there were fewer participants. Another factor that must be mentioned is the varying degrees to which the ASCA National Model is implemented at each site. Though there were evaluations and a district push for comprehensive counseling programs at each site, some programs in the district were more fully implemented than others. It is uncertain how the level of comprehensive counseling program implementation confounds the results. Further research examining this topic and caseload size would be beneficial.

Additionally, a limitation that must be mentioned is that even though there are 3,600 2- and 4-year postsecondary institutions that participate in providing NSCH enrollment data, there are higher education institutions that do not participate. If institutions choose not to participate or if they do not receive federal financial aid, such as international institutions, students' postsecondary enrollment data will not appear if they enroll in these institutions. Also, trade schools that help postsecondary students with skills are not included in this data. Hence, some of the students in this cohort who did not show up as having enrolled in postsecondary colleges might have enrolled in these other postsecondary institutions.

Furthermore, because of the limitations of the data collected, it was difficult to ascertain the quality of the contact that students had with their school counselor; for example, who initiated the meeting, how frequently and for how long did they meet, and what was the quality of their encounter? Related to data limitations, closer examination of small *n*-size student ethnicity groups should be conducted as well, as there may be factors unique to them. Lastly, as this was a correlational study, findings do not show causality. Future investigations should further explore the student–counselor dynamic and what characteristics may lead to more successful student outcomes related to postsecondary enrollment. Also, future studies should examine students' experiences with counseling during high school as it relates to their persistence in college enrollment, which our study did not address.

Implications for School Counseling

This study has some important implications regarding high school counselors and college counseling. For many students, school counselors serve as bridges to social capital in the college attainment process. Although there are a variety of factors that influence student postsecondary enrollment, two specific contacts with school counselors in this district were significantly related to the likelihood of attending a postsecondary institution. Specifically, contact with school counselors regarding attendance was associated with a decreased likelihood of postsecondary enrollment, while contact with school counselors about college planning was associated with a higher likelihood of postsecondary enrollment. Though the study was exclusive to one particular school district, the demographic makeup is not unique. The findings of this study point to the need for school counselors to meet with their students regarding college-related topics, and a need to pay attention to students who have attendance issues because of the likelihood of them being at risk for not succeeding academically. Also, our findings indicate that attention needs to be given to Latinx students and students from lower socioeconomic backgrounds in order to help improve their access to higher education.

The obstacles school counselors face with regard to caseload size and non-counseling administrative duties severely hinder their ability to meet the needs of their students. The fact that these students who had met with their school counselors for college planning showed a higher likelihood of attending a postsecondary institution clearly supports the fact that school counselors can play a significant role as sources of social capital for students in postsecondary enrollment.

Because this study only examined a limited number of college-related school counselor contacts, future studies should investigate the quality, type, and frequency of school counselor contact that positively influences students' postsecondary success. Future studies should clearly operationalize each type of contact that goes beyond a binary data type. Researchers also should consider investigating associations among high school counselor–student contacts and college graduation rates and success, as the present study only examined college enrollment and was not explicitly related to college success. Quantitative research on tiered interventions, focused on the students with college-qualifying GPAs who chose not to attend, and qualitative research to examine reasons why, would be practical next steps.

Findings in this study bear implications for school counselor training. We believe that it is important to prepare school counselors-in-training to identify and become skillful in providing the types of school counseling services that contribute to students' college and career readiness. For example, counselors-in-training should be trained to identify and intervene with students who have attendance issues and are at risk for not succeeding academically, and understand that the likelihood of attending college is significantly lower for those students than their peers. In preparing school counselors to collect data and create comprehensive programs that reach all students, counselor educators are training change

agents who can provide evidence to administrators that school counselors positively influence students. An implication for school counselors is that data on their interactions with their students at the school site level are important sources of evidence, which they can use to advocate for themselves and their services to students.

Overall, it seems that school counselors can positively influence their students despite negative environmental factors outside of school. School counselors serve as sources of social capital for students, which helps student outcomes. Lastly, it is imperative that school counselors self-advocate and provide intentional interventions to at-risk populations who do not have as much social capital in the educational system as compared to their more advantaged counterparts.

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