# AN ABSTRACT OF THE DISSERTATION OF

<u>Angela K. Tang</u> for the degree of <u>Doctor of Philosophy</u> in <u>Counseling</u> presented on <u>June 6, 2016</u>.

Title: <u>Student College Enrollment and High School Counseling: Two Studies Based</u> on Data Collected in an Urban School District.

Abstract approved:

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Student success in terms of college preparedness and postsecondary college enrollment is one of the current major focus in the school counseling profession. The current literature indicates that school counselors can positively influence their students' needs and performance outcomes, yet the profession is calling for more evidence to support the role of the school counselor as it is yet clearly defined, understood, and strongly supported. There is a dearth of research that examined the extent student contacts with school counselors and comprehensive school counseling program implementation levels predict student postsecondary enrollment in 2- and/or 4-year colleges. Based on social capital theory, the purpose of this dissertation was to examine school counselor interventions and school counseling programs as sources of social capital for high school students in their postsecondary college enrollment. The researcher investigated school counselor interventions through two studies based on two archival datasets obtained from an urban school district in a Western state in the United States. The first study (*N*=2,209) used multiple logistic regression analysis and the second (*N*=1,919) used multinomial logistic regression analysis.

The first study examined the extent school counselor contacts could predict students' subsequent postsecondary enrollment in 2- or 4-year institutions within five years of high school graduation. Results in this study indicated that that counselor contact regarding college planning, attendance, and 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. The first study correctly predicted 69% of the outcomes.

The second study examined the extent comprehensive school counseling program implementation and school counselor-student ratios (caseload size) could predict students' subsequent postsecondary enrollment in 2-year and/or 4year institutions within three years of high school graduation. Results from the study indicated that caseload size, three of four comprehensive school counseling program implementation groups, and some ethnicities were significant predictors of postsecondary enrollment. The second study correctly predicted 59.9% of the outcomes.

Overall, findings in both studies contribute to the growing body of knowledge that supports the hypothesis that school counselor contacts with students and comprehensive school counseling programs are contributing to students' social capital in relation to students' postsecondary college enrollment. Findings in these studies bear relevance for practicing school counselors,

counselor educators, and administrators.

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> by Angela K. Tang

# A DISSERTATION

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APPROVED:

Major Professor, representing Counseling

Dean of the College of Education

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Angela K. Tang, Author

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# **Chapter 1: General Introduction**

# **Dissertation Overview**

Many young adults do not pursue education after high school, and that severely limits their lifetime earnings and career advancement (Carnevale, Rose, & Cheah, 2011). Recently, the national stage beyond the education profession has taken an interest in college and career readiness as the United States is falling behind other developed nations in student success. The 2011-2012 school year data indicate that roughly 81% (3.1 million) of the American high schoolaged population graduated with a regular diploma (National Center for Education Statistics [NCES], 2015a). However, a considerable number of high school graduates do not proceed to postsecondary education. For example, in Fall 2012, only 66.2% of recent high school graduates enrolled in a 2-year or 4-year postsecondary institution (NCES, 2015b). There is a large gap between those who graduate and those who move on to a postsecondary institution; and that disparity is even larger than it appears because recent high school graduates are defined as any individual aged 16 to 24 who have completed their high school diploma within 12 months of enrolling in a postsecondary institution. That means, non-traditional students are included in the 66.2% of recent high school graduates who enroll in a postsecondary institution, making the number of students matriculating directly to college from high school even smaller.

Across the nation, there are initiatives and professional movements made towards increasing the number of individuals enrolling in college after high school. Within the discourse, the role of the school counselor has been highlighted as one, among many, of the crucial roles schools should play in preparing students for postsecondary enrollment (Holcomb-McCoy, 2010; Perna et al., 2008; Reach Higher, n.d; Venezia & Jaeger, 2013). Majority of the authors in the school counseling literature extol the role of the school counselor and argue that extraneous and

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burdensome administrative duties inhibit school counselors from supporting and preparing students for college readiness (Perna & Titus, 2005). Progressive school counseling through comprehensive school counseling programs has been identified as a way to expand the stereotypical school counselor role to include college counseling as a way to improve rates of postsecondary enrollment (Gandara & Bial, 2001; McDonough, 1994; McDonough, 2006).

This dual-manuscript dissertation is a demonstration of scholarly work that uses the Manuscript Document Dissertation Format, as outlined by the Oregon State University Counseling Education Ph.D. Program Manual. Based on this format, Chapter 1 provides an introduction to the two journal manuscripts. Chapters 2 and 3 present two research projects based on archival data from a school district in the United States. Both projects address a common theme in school counseling. Chapter 4 links all manuscripts thematically and discuss the findings. Chapter 2 entitled, "High School Counselor Contacts as Predictors of College Enrollment," and Chapter 3 entitled, "Comprehensive School Counseling Programs and Caseload Size as Predictors of 2-Year and 4-Year Postsecondary Enrollment," are unique in that they focus on school counselor duties, comprehensive school counseling programs, and postsecondary enrollment in both 2-year and 4-year institutions.

The two studies in this dissertation build upon each other to fill a gap in the school counseling literature. The data for both manuscripts are archival datasets from a large, urban school district in a Western state in the United States. Through submitting a research proposal to the school district, they consented to the studies (see Appendix B). The data was collected by the school district during the 2009-2010 and 2011-2012 school year, with subsequent postsecondary enrollment data collected from 2010-2014. The first dataset used in the first manuscript (Chapter 2) focused on 2,209 12<sup>th</sup>-grade students who graduated in 2010. The data came from the

responses these students provided in their senior exit survey regarding their contacts with their school counselor. The dataset also included information on students' postsecondary enrollment at either a 2-year or 4-year college five years after graduation. The second dataset used in the second manuscript (Chapter 3) focused 1,919 12<sup>th</sup>-grade students who graduated in 2012, the degree of comprehensive school counseling program implementation during the 2011-2012 school year, and caseload size during that same time as variables that may influence student postsecondary enrollment. The dataset also included information on students' ethnicity and postsecondary enrollment at a 2-year or 4-year institution within three years after high school graduation.

### Importance to the Profession of School Counseling

These two manuscripts are potentially significant to school counseling literature for several reasons. First, 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 counseling curriculum based on school need, imparting core curriculum lessons, connecting with other stakeholders, planning, and counseling individually with students at all levels. After the creation and introduction of the ASCA National Model in 2001, the school counseling profession across the nation has focused on data, accountability, and how school counselors can reach all students in their schools (ASCA, 2012; Marisco & Getch, 2009).

High school counselors meet career and personal/social student needs; however, they also play a crucial role in ensuring their students are on track for high school graduation, assisting with college applications, and filling out financial aid applications, especially for first-generation and marginalized students who rely more heavily on school to complete the process (Lapan, 2012; Martinez, 2013; McDonough, 2005). Many of the planning services can be initially implemented in a classroom lesson format and followed up with individual support.

Second, studies have shown that smaller caseloads —student-to-counselor ratios—give students more access to school counselors for individual support and college planning; and smaller caseload sizes and college planning activities may significantly influence postsecondary enrollment immediately after high school graduation (Belasco, 2013; Engberg & Gilbert, 2014; Woods & Domina, 2014). These studies further suggest that school counselors positively impact students' transitions to postsecondary institutions in a variety of ways. While providing valuable information, these studies did not examine the possible effects of comprehensive school counseling programs on 2-year and 4-year postsecondary enrollment, or ethnicity combined with comprehensive school counseling programs as factors in postsecondary enrollment.

Additionally, due to the fact that only 12 states have mandated school counselor-tostudent ratios, unlike the strict mandates states have for teachers, many school counselor positions get cut from the budget in times of financial difficulty (Hurwitz & Howell, 2014; Perna et al., 2008). As a result, when school counselor positions are cut, student-to-counselor ratios generally rise dramatically. This impacts schools negatively as school counselors are often the only trained professionals to support students in the areas of academic, career, and social emotional topics (Lapan, 2012; Martinez, 2013; Perna et al., 2008). Because school counselors play a crucial role in student support services but are often the first to be cut from the budget, the school counseling profession has been calling for more evidence and literature that support the positive impact school counselors have on student outcomes (Brigman & Campbell, 2003; Hurwitz & Howell, 2014). Third, in looking at the literature, an area that has not been examined closely is the topic of specific school counselor duties, especially within the context of a comprehensive school counseling program, and how these factors might impact students' postsecondary enrollment. This area is important to explore as it will help identify specific tasks, outside of college planning, that school counselors perform that help students most. Additionally, exploring the context that comprehensive school counseling programs provide in relation to postsecondary enrollment would further strengthen the school counselor role in schools. Despite growing awareness and recognition that school counselors are equipped to support all students, there is still a need for more evidence to support school counselor effectiveness, specifically on the topic of college and career preparedness (Carrell & Hoekstra, 2014). There is also a need to examine a larger period of time after high school graduation for postsecondary enrollment that includes 2year colleges as well as 4-year colleges.

Both of the manuscripts are examined through the lens of social capital theory. Through this framework, school counselors and their interventions are viewed as sources of social capital that can help students increase their levels of social capital.

### **Manuscript I**

Manuscript I entitled, "High School Counselor Contacts as Predictors of College Enrollment," is a retrospective, correlational study that uses binary logistic regression analysis. It contributes to the school counseling literature by examining specific school counseling duties that may be associated with students' postsecondary enrollment within five years of high school graduation. The research question that guided this study was: To what extent do the following student-school counselor contacts as reported by graduating high school students predict postsecondary institution enrollment (2-year and 4-year inclusive; yes or no)?

- 1. Contact related to attendance (yes or no);
- 2. Contact related to college planning/scholarship support (yes or no);
- 3. Contact related to concerns about grades (yes or no); and
- 4. Contact related to goal setting (yes or no).

We hypothesized that students who met with their school counselor would have higher rates of postsecondary enrollment. Our null hypothesis was that there was an equal chance of postsecondary college enrollment (yes or no) for the set of predictor variables stated in the research question. Additionally, ethnicity, free and reduced lunch status and perception of more college assistance needed were also part of the variables examined in the first study.

The multiple logistic regression analysis indicated statistically significant correlations between college planning contact with a school counselor and subsequent postsecondary enrollment at least once in the five years after high school graduation. Students who reported meeting with their school counselor regarding college planning enrolled in both 2-year and 4-year institutions at higher rates than students who did not meet with their counselor. School counselor contact regarding attendance, and student participation in free and reduced lunch were the only other variables that were statistically significant. Students who reported meeting with their school counselor about attendance, and those that participated in free and reduced lunch, attended both postsecondary institutions at lower rates than their peers. Though hypothesized, school counselor contacts regarding goal setting, concern about grades, and perceptions about needing more postsecondary information, were not significant. Details of the study and its findings are found in Chapter 2.

## **Manuscript II**

Building upon the first study, Manuscript II entitled, "Comprehensive School Counseling Programs and Caseload Size as Predictors of 2-Year and 4-Year Postsecondary Enrollment," is a retrospective, correlational study that uses multinomial logistic regression analysis. It examines how comprehensive school counseling programming and caseload sizes predict students' postsecondary college enrollment at 2-year institutions and 4-year institutions. Findings from this study are believed to be important for school counseling advocates, administrators and other educators that support school counselors as they highlight the influence the school counseling profession can have on student postsecondary enrollment. The research question that guided this study was: To what extent does comprehensive school counseling program implementation and school counselor caseload size predict 2-year college enrollment and 4-year college enrollment? We hypothesized that schools that had a more fully implemented school counseling program would have higher rates of postsecondary enrollment. Our null hypothesis was that there was an equal chance of 2-year college enrollment and 4-year college enrollment regardless of comprehensive school counseling program implementation and school counseling school counseling program implement for school counseling program

The multinomial logistic regression analysis indicates that students on larger caseloads were slightly less likely to attend a 2-year institution and 4-year institution. Some of the ethnicities indicated they were significant predictors of 2-year institution enrollments with increased likelihoods of attending over not attending. There was only one ethnicity found to be a significant predictor of 4-year institution enrollment, but it was not an increased likelihood of attending, and was instead a decreased likelihood of attending. Additionally, the majority of comprehensive school counseling program implementation scores were indicated as being significant predictors of 2-year and 4-year institution enrollment. Surprisingly, the highest implementation scores were not significant predictors of 2-year or 4-year college enrollment. Details of the study are presented in Chapter 3.

In Chapter 4, findings in the two studies are discussed further. The chapter focuses on interpreting the results and discussing practical implications for the future. It will also address limitations to the studies.

#### Summary

Within the school counseling profession, it is widely understood that there is a demand for more outcomes research related to how school counseling impacts student outcomes (Carey, Dimmitt, Henningson, & McGannon, 2005; Hurwitz & Howell, 2014; Paolini & Topdemir, 2013). Such evidence will significantly inform the training and practice of school counselors, particularly in the current age of evidenced-based practices (McGannon, Carey, & Dimmitt, 2005). Also, in the current climate of data-driven programs and evidenced-based interventions, such research is crucial to supporting and protecting school counselor roles and positions within the school systems. This dissertation topic was chosen in order to contribute to the current discourse in the field of professional school counseling, as well as to provide evidence to support the vital role school counselors play in assisting students reach their postsecondary goals. Each of these studies provides meaningful professional contributions.

# Glossary of Terms

*Caseload* – The number of students a school counselor is assigned to support (Woods & Domina, 2014)

*Comprehensive school counseling programs* – A delivery and management system of support and psychoeducation school counselors provide all students (ASCA, 2012)

*Postsecondary* – Generally refers to the educational or career path students choose after they complete high school

Postsecondary enrollment – Enrollment in a 2-year or 4-year institution (Plank & Jordan, 2001)

*School counseling* – This is defined as the profession of school counseling, which is comprised of individuals who hold the appropriate state licensure/credential (ASCA, n.d.)

Senior exit survey -A survey given to  $12^{th}$  grade students to gauge their use of school services and their perceptions of their educational experience

*Social capital* – the influences and relations that individuals have with others, the systems in which they live, and the impact of those influences and relations on their decisions and "productive activities" (Coleman, 1988)

# COLLEGE ENROLLMENT AND HIGH SCHOOL COUNSELING

## Chapter 2

# High School Counselor Contacts as Predictors of College Enrollment

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#### Abstract

Based on archival data from an urban school district, this retrospective, correlational study (N=2,209) examined the extent student-school counselor contacts could predict high school students' postsecondary enrollment in 2-and/or 4-year colleges within give years of graduating from high school. In addition to these variables, supplemental demographic information such as ethnicity, GPA, and free and reduced lunch status were used to identify other trends in the data that might have existed. The results from multiple logistic regression analysis showed that counselor contact regarding college planning, attendance, and 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. These findings suggest that some school counselor duties may serve as sources of social capital, which can help increase student social capital.

Keywords: school counselors, postsecondary enrollment, multiple logistic regression

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 counseling curriculum based on school need, imparting core curriculum lessons, connecting with other stakeholders, planning, and counseling students at all levels. Through these various functions school counselors interact and impact students they serve.

School counselors have been found to impact their students' academic, career, and personal/social outcomes in a variety of ways. For example, at the elementary school level, counselors in Florida were linked to a significant increase in achievement and reduced misbehavior in boys by 20% and girls by 29% (Carrell & Hoekstra, 2014). In another study that focused on 146 middle school comprehensive school counseling programs, researchers found that even though students needed to participate in the programs for multiple years before significant results could be seen, those who did participate academically outperformed their comparison peers (Akos, Mvududu, Sink, & Turnbull, 2008). Additionally, other statewide studies focusing on school counseling programs have found that such programs assisted in increasing test scores, improving student grades, lowering suspension rates, and increasing feelings of school connectedness, among other things (e.g., Carey & Harrington, 2010; Carey, Harrington, Martin, & Hoffman, 2012; Lapan, Gysbers, & Sun, 1997).

Recently, there has been an ignition of efforts in education to matriculate students to higher education after high school as national attention focuses on the United States' postindustrial society, where only 66.2% of graduating high school students enrolled in a 2-year or 4-year college in fall 2012 (Clinedinst & Hawkins, 2007; Hill, 2011; National Center for Education Statistics [NCES], 2015a; NCES, 2015b). The individuals who are most recognized as responsible for the transition from high school to postsecondary institution, especially for low-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 (Corey & Dimmitt, 2012). Through the present study, we seek to add to the literature by examining the extent to which school counseling duties predict high school students' postsecondary enrollment. We believe that such focus is in keeping with the focus of the current national dialogue on student success.

#### **National Focus on College and Career Readiness**

The topic of college and career readiness has become a large focus that has moved beyond educational circles and academia and reached a national stage. The White House has become involved with encouraging students to pursue and achieve postsecondary education as part of Lady Obama's Reach Higher initiative (Whitehouse Reach Higher, n.d.). The initiative focuses on encouraging all American high school students to persevere and further their education at a postsecondary institution. It further recognizes and highlights the work that school counselors contribute to students' college and career preparedness. This White House initiative, coupled with the First Lady's prominence, legitimizes the school counseling profession ("ASCA and Reach Higher", n.d.). This recognition substantively shifts the professional identity of school counselors away from one that is reactive to one that is proactive; something that the ASCA National Model has encouraged since its inception in the early 2000s (DeKruyf, Auger, & Trice-Black, 2013). Specifically identifying school counselors as important college and career resources for students significantly helps the school counseling profession. However, empirical evidence is needed to verify the effectiveness of such role and services.

Despite the growing body of evidence and recognition that school counselors can provide crucial support to students, there is still limited documentation to support the effectiveness of school counselors, particularly as it relates to student outcomes in college and career preparedness (Carrell & Hoekstra, 2014). Over the past couple of decades, there has been a consistent demand from within the school counseling profession for good outcomes research about school counseling and how school counseling impacts student outcomes (Carey, Dimmitt, Henningson, & McGannon, 2005). With the current focus on increasing transitions from high school to college, school counselors have the opportunity and responsibility to demonstrate the effects of their work with students by conducting empirical studies. Such outcomes research is crucial in today's climate, where the need for evidence-based decisions and justification for personnel is paramount to the bottom line in school districts in the United States (McGannon, Carey, & Dimmitt, 2005). Because the primary attention of college and career readiness is on high school, it is important to examine current roles and duties of high school counselors.

# Roles, Responsibilities, and Challenges, of High School Counselor

Though the school counselor role focuses on complementary preventive services to support and increase student success in academic, career, and personal/social areas, there is a stronger focus on behavioral and academic interventions in the comprehensive school counseling programs in elementary and middle schools (Gysbers & Henderson, 2014). High

school counselors, however, generally have a different focus for their programs. While meeting career and personal/social student needs, high school counselors 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). For high school counselors, many of the planning services can be initially implemented in a classroom guidance lesson format. After the guidance lessons, there will be follow-ups for individual support. Individual support can be in the form of goal setting, college or financial aid application assistance, remedying attendance issues, addressing concerns about grades, and a multitude of other reasons, as they are all interconnected to student achievement and transition to postsecondary options.

Though increasing college and career services is a current focus in K-12 education, particularly in school counseling, oftentimes, school administration and district leadership may not perceive these services to be part of school counselor duty. In fact, 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 et al., 2012; Paolini & Topdemir, 2013). Instead of being able to wholly focus on providing personal/social and college and career services, school counselors are often times saddled with administrative tasks such as entering transcripts, grade verifications, and test proctoring.

Though some educators understand the role of the school counselor, many do not. Because there is not a direct mandate for school counselors in many states like there is for teachers, many school counselors get cut from the budget during times of economic difficulties (Shamlin, 2014). 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). Among the many school counseling areas that need evidence to support their legitimacy, more data is needed to shed light on school counselors' influence on student college enrollment, especially as national attention has riveted towards the issue. In conceptualizing the impact of school counselor duties in schools, we will be using school-based social capital theory as a framework for our study.

## **School-Based Social Capital Theory**

Throughout the literature that examines student enrollment in postsecondary options, risk factors that may prevent higher educational attainment, and different ethnic group perceptions of higher education, the topic of social capital consistently surfaces. Social capital can be defined as the influence and relations that individuals have with others, the systems in which they live, and the impact of those influences and relations on their decisions and "productive activities" (Coleman, 1988). Often times, social capital, or the lack thereof, is more visible within some groups than others. Social capital often presents itself when ethnicity, socioeconomic status, and cultural gender expectations are examined, as they are all factors that can play a role in higher education attainment (Pham & Keenan, 2011).

Several areas of social capital that impact student postsecondary decisions have been identified. However, two have been identified as particularly influential; they are parents/familial support and school support (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011; Stanton-Salazar & Dornbusch, 1995). Both social and cultural capitals have been identified as crucial factors in a student's decision to enroll in college, as there are many "hidden" rules one must know to successfully navigate the college application and financial aid system (Lieber, 2009; Plank & Jordan, 2001; Stephan, 2013). For example, there is a lot of misinformation regarding the actual cost of college. Many students and families that qualify for financial aid do not believe they have the means to afford the cost; and thus, do not pursue postsecondary enrollment (Bozick & DeLuca, 2011; Freedman, 2011; Perna, 2008). Counselors can close this gap in social capital. Counselors who are consistently available to students and parents can positively impact student achievement and aspirations. Hence, interaction with school counselors is a form of social capital for students (McDonough, 2005). Based on social capital theory, in this study, we are examining the interactions students have with their school counselors that potentially relate to students' postsecondary attainment. Specifically, we are examining school counseling duties as forms of social capital for students that provide a conduit for bridging gaps and achievement.

### **School Counselors Increasing Student Social Capital**

In response to the need to investigate school counseling effectiveness, researchers had studied school counselors' impact on a variety of student-related variables such as academic performance, career, personal/social, and student life choices after K-12. For the purposes of the present study, we will focus our review of the literature on studies that specifically investigated high school counseling and student postsecondary college enrollment. In reviewing the literature, research regarding school counselor impact on student postsecondary outcomes can be categorized into the following two areas: (a) impact of school counselor interventions on college self-efficacy and enrollment, and (b) postsecondary enrollment factors.

# **Impact of School Counselor Interventions on Postsecondary Outcomes**

Many factors impact students' decisions to enroll in postsecondary institutions. These include the work of elementary and middle school counselors who help students build skills that assist them in subsequent postsecondary transitions. For the purposes of our current study, we focus our literature review exclusively on school counselor interventions at the high school level.

Researchers have investigated the impact of high school counselors on student knowledge and enrollment in postsecondary options. The majority of the studies tended to focus specifically on school counselor caseload size and related school counselor duty outcomes. Smaller student-to-counselor ratios have been found to increase student postsecondary enrollment (Engberg & Gilbert, 2014; Hurwitz & Howell, 2014; Pham & Keenan, 2011). Woods and Domina (2014) used logistic and multinomial regression to analyze the data in the 2002 Education Longitudinal Study (ELS) and found that the larger the counselor caseload, the less opportunity students had for individual college planning. In this study, a larger caseload had a mean of 136:1. The variables of this study focused primarily on caseload size and opportunity for college planning. This study was the only one found that also examined 2-year institution enrollment. While this study's results highlighted the potential benefits of smaller caseload sizes, the study did not acknowledge or examine the potential impact of comprehensive school counseling programs and specific school counselor duties. Additionally, it did not specify how the counselors managed caseloads, or if the students had access to all counselors or only a specific few.

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Expanding on the previous study and using more recent ELS data, Engberg and Gilbert's (2014) study highlighted the benefits of smaller student-to-counselor ratios by finding that high school counseling departments that had an average caseload and spent more than half their time on college-related topics had higher rates of sending students to college. In this study, the average caseload size was 272:1, with a maximum caseload of 1178:1. Using a hierarchical regression model on the 2009 High School Longitudinal Study (HLS) with about 23,000 students in its sample, researchers in this study specifically examined structures within schools that allowed for college-related topics. This study examined only 4-year college enrollment and not 2-year college attendance.

Hurwitz and Howell (2014) used regression discontinuity design in a study and found that having an additional school counselor and reducing school counselor caseloads were related to a 10% increase in four-year college enrollment. This particular study used the Schools and Staff Survey (SASS) administered by NCES. These researchers only examined the 12 states that had school counselor ratio mandates and focused on 4-year institution enrollment. Additionally, they received their postsecondary enrollment data from principals; and it is unclear if the data were student self-report. Nevertheless, this study provided evidence to show the potential impact school counselors could contribute to students' social capital in relation to postsecondary enrollment.

Similarly, Pham and Keenan (2011), using logistic regression models, focused on large student-to-counselor ratios. They examined seven high schools in a large, urban American school district and found that the large ratios were severely impacting the ability of high school counselors to help their first-generation and low-income students apply for college. The mean student-to-counselor ratios, with respect to their study, hovered about 320:1, with a maximum of 500:1. In their study of 1,305 participants, Pham and Keenan found that the higher the first-generation student-to-counselor ratio, the lower the likelihood that a qualified first-generation student would enroll in a four-year university. This finding corroborates with 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. Additionally, another study that used logistic regression and the ELS as a data source, found that schools with more school counselors, or lower caseload ratios, had a higher percentage of students that applied to two or more schools (Bryan et al., 2011). This serves to further corroborate the evidence that school counselors positively help increase student social capital. Though providing clear outcomes, Bryan et al.'s (2011) study focused on application rate and not on actual college enrollment. These authors noted the secondary data source they used and that the study did not investigate actual 2-year and 4-year postsecondary institution enrollment.

Belasco (2013) used logistic regression to analyze the ELS data and highlighted the association between school counselor meetings with students and subsequent postsecondary enrollment; however, it only examined the first fall after high school graduation and excluded enrollment in 2-year institutions in the analysis. Nonetheless, this study found that students in a national sample who visited their counselor for college-related topics were more likely to enroll in four-year institutions.

The abovementioned studies examined large archival data sets and appropriately used regression analyses of varying types to examine the many concurrent variables that influence students and related outcomes. It is important to note that findings in these studies support the argument that school counselors contribute to student social capital and can bridge social capital gaps in students in whom such gaps may exist. Specifically, findings in the studies indicate that specific contacts with school counselors contribute to students' 4-year college postsecondary enrollment. Interestingly, our review of the literature only revealed one study that examined 2-year institution enrollment; however, it only examined college planning and not other school counselor contacts.

Overall, though there is much 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 the influence of comprehensive school counseling programs, specific counselor duties, and enrollment in 2-year institutions. Though college counseling and academic counseling is within the scope of a high school comprehensive school counseling program and school counselor duties, school counselors are often not supported in providing the full-attention the area deserves (Corwin, Venegas, Oliverez, & Colyar, 2004). Thus, it is crucial to examine what exact duties school counselors perform that potentially influence student postsecondary enrollment in order to advocate for more time to do the identified duties.

#### **Purpose of the Study**

Based on social capital theory, the focus of this study was to examine specific school counseling duties and their influence on their postsecondary enrollment. In particular, we wanted to know whether students' contacts with school counselors serve as a source of social capital that contribute to students matriculating to higher education. Though similar to previous studies in using logistic regression analysis, there was uniqueness in the present study that we believe would serve to address a gap in the literature. The first was that specific school counseling duties were examined, as opposed to only examining school

counselor contact for college application support. The second was the expansion of the enrollment window of time from immediate enrollment post high school graduation to any college enrollment term five years after high school graduation. The third was that the dataset came from a large urban chool district that embraces and strongly encourages the ASCA National Model implementation at each school site.

We believe the present study is significant in several ways. First, for various reasons, some high school graduates would choose to not advance to college immediately upon graduation though they have the qualification to do so; but some of them would enroll in college a few years later. Hence, the current study's attempt to capture college enrollment up to five years post-graduation is likely to expand the scope of inquiry regarding actual postsecondary enrollment. Second, the focus of our study addresses a limitation in the existing studies on postsecondary college enrollment that had mainly focused on college application rates (e.g., Bryan et al., 2011) and enrollment immediately upon graduation (e.g. Belasco, 2013) by looking at actual postsecondary college enrollment. Third, findings in the current study may also provide practicing school counselors with evidence to review their work activities as well as advocate for more time spent on valuable duties. Lastly, our findings may serve to provide information to the profession and its advocates, such as ASCA, to assist them in their advocacy effort and policy recommendation.

Based on social capital framework and existing research as discussed above, the research question that guided the current study was: To what extent do the following student-school counselor contacts as reported by graduating high school students predict postsecondary institution enrollment (2-year and 4-year inclusive; yes or no)?

1. Contact related to attendance (yes or no);

- 2. Contact related to college planning/scholarship support (yes or no);
- 3. Contact related to concerns about grades (yes or no); and
- 4. Contact related to goal setting (yes or no).

Our null hypothesis was: There is an equal chance of postsecondary college enrollment (yes or no) for the set of predictor variables stated in the research question.

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 students' response to the question: Were there parts of the college search and/or application process you felt you needed more assistance or information? The district provided free and reduced lunch status qualification (yes or no); and whether or not they enrolled at least once in a 2-year or 4-year postsecondary institution in the subsequent five years after graduation (yes or no). Furthermore, student GPA, ethnicity, gender, and school attended were used as anchor variables to further examine trends within the data that might not be readily visible.

# Method

### Design

The present study was a retrospective, correlational study that used binary multiple logistic regression to analyze an archival dataset that contains, among other information, high school students' reported contacts with their school counselors and their subsequent college enrollment. Binary multiple logistic regression does not assume a normal distribution, which makes it appropriate for this study as it simultaneously focuses on a relationship between types of school counselor duties and postsecondary college enrollment that were reported in a binary (categorical) fashion. In this study, the phrase "school counselor duties" and "types of school counselor contacts" are used interchangeably. We recognize they may have different connotations based on the context; however, in our study, the participants were reporting the contacts they had with their school counselor regarding a variety of school counselor duties. In this case, the contacts and the duties are perceived as synonymous.

The school counselor contact data were collected from 17 high schools in one school district during the 2009-2010 school year. Each high school collected information in the form of an exit survey from 12<sup>th</sup> grade students as a part of their transition out of high school. The survey was a mandatory part of the process. After graduation, the school district collected postsecondary enrollment data from the National Clearing House for each subsequent school year. These college enrollment data were then matched to students' 12<sup>th</sup> grade senior exit survey information, respectively.

# **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. To give perspective, the total K-12 enrollment in October 2010 was 79,423. With respect to socioeconomic status, in this school district, students qualify for free lunch if their family earns less than approximately \$30,600 for a family of four, and reduced lunch if their family earns less than approximately \$43,500 for a family of four. In 2010, this school district had a 65% free and reduced lunch rate. As result, more than 51,600 students in the district in 2010 qualified for free or reduced lunch.

With regards to school counseling, the district follows the ASCA National Model (ASCA, 2012) and encourages comprehensive school counseling program implementation

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at each site. School counselors are individually evaluated on the National Model. By way of providing district-wide support, the school district requires high school counselors to provide district-created core curriculum lessons on financial literacy, goal setting, academic progress, and career goals each year. All of these lessons are given at each grade level, making a minimum of 16 lessons a year. However, school counselors have the freedom to supplement this information based on the needs of their school.

# **Participants**

The target population studied were 12<sup>th</sup> grade students who were slated to graduate in June 2010. We selected this cohort because we had access to their postsecondary enrollment information for five years after their high school graduation. The total number of 12<sup>th</sup> grade students in the 2010 cohort who took the survey was 2,276. Of those students, only 2,209 were selected for the present study due to missing information necessary for the study. All students in this dataset graduated high school in their designated year. The dataset was gathered from all 17 traditional, non-charter high schools in the district. There were roughly 1,100 additional students who all graduated that year in the district but attended charter schools. The students in charter schools did not participate in the exit survey as they followed their own graduation guidelines as required by the charter schools. As such, we were not able to include these students in our study.

The demographic breakdown of the final study sample is 3.9% Asian, 20% African-American/Black, .04% Hawaiian/Pacific Islander, 47.5% Hispanic/Latino, .09% Native American, .09% two or more ethnicities, and 30% White. This breakdown is representative of the district at large. This breakdown pertains only to the 2,209 individuals who completed the senior exit survey during the 2009-2010 school year. Of the sample used, 1181 (53%) students qualified for free or reduced lunch, while 1028 (47%) did not qualify.

## Measures

Senior Exit Survey. This school district administers its Senior Exit Survey to each senior each school year between May 15<sup>th</sup> and June 15<sup>th</sup>. For our study, the data collection followed these guidelines. The purpose of the survey is to assess what types of support services students accessed during their high school careers, and which services students could still benefit from during a summer intervention. The survey also takes inventory of parental educational level, perceived barriers to postsecondary options, and postsecondary plans. In the 2010 edition, the survey contained 19 questions that made up four sections: demographics, academic, career, and personal/social. The latter three areas are directly aligned with the ASCA National Model (ASCA, 2012). The predictors selected from this survey for the current study were participants who indicated they had met with their school counselor about: (a) attendance, (b) "college planning/applications/essays/scholarships", (c) concerns about grades, and (d) goal setting. The survey also included a question that asked students if "There were parts of the college search and/or application process with which they felt they needed more assistance or information." We incorporated responses to this 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-year or 4-year college.

**National Student Clearinghouse data.** National Student Clearinghouse (NSCH) Data is information that is collected from over 3,600 colleges and universities, both private and public. Membership in the Clearinghouse is open to any post-secondary institution that participates in the Federal Title IV program. Essentially, if they participate in federal financial aid, they are eligible. The data includes degrees obtained and enrollment in postsecondary institutions (National Student Clearinghouse, n.d.). The specific information used as the outcome variable in our study was whether or not students enrolled in a 2-year or 4-year postsecondary institution at least once in the five years after graduating from high school (coded as yes or no). We decided to use the 5-year time frame because not all students would enroll immediately in college upon high school graduation and we wished to capture students who enrolled later. Additionally, previous studies (e.g. Belasco, 2013; Engberg & Gilbert, 2014), to the best of our knowledge, examined enrollment immediately upon high school graduation.

**District data.** Student data that have been known to impact achievement and postsecondary enrollment, such as grade point average (GPA), free and reduced lunch qualification, and ethnicity, were provided by the district as well. The district collects such demographic information to make informed decisions and provide extra services as necessary. District data included in the data analysis were: (a) ethnicity, (b) grade point average, (c) gender, (d) free and reduced lunch status, and (e) which school they attended.

#### Procedures

A de-identified dataset was obtained from the school district's research department after receiving a research proposal from the first author. The school district uses Naviance, a versatile software to collect the data. The data are used district wide to help students make academic plans and take career assessments. They are also a means for school counselors to monitor student progress. The dataset analyzed in the current study encompasses responses on the senior exit survey regarding school counselor contact, National Clearinghouse student data for five academic years after their high school graduation date, and general demographic information. This information was combined to create a longitudinal dataset that captured 12<sup>th</sup> grade individual student interactions with their school counselors and their subsequent postsecondary enrollment information for five years post-high school graduation.

More specifically, the data collected from the Senior Exit Survey included the binary outcomes of: (a) school counselor interactions (i.e., met or did not meet with school counselor) for attendance-related issues, (b) college planning, (c) concerns about grades, and (d) goal setting.

# Analysis

Before the statistical analysis began, an examination for missing data occurred. This found that 68 surveys were considered invalid due to missing information. These cases were not included in the analysis.

A multiple logistic regression was performed, with binary and multinomial variables, using Statistical Package for Social Sciences (SPSS) to examine whether the set of school counseling duties (dependent variables) are statistically significant in predicting 2-year or 4year institution enrollment (independent variable). In addition to these, supplemental independent predictor variables were included to assess their relative contribution to the outcome response. School counseling duties were coded as binary variables, gender was coded as binomial, and ethnicity and school name were coded as multinomial.

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

In order to ascertain the number of participants required to make a strong study, G\*Power (2009) was used. According to the information, 89 individuals are the minimum number of participants required to ensure the results have enough power to have weight. With 2,209 participants, there were enough individuals to ensure a strong study. In order to reduce the possibility of a Type II error, we used an alpha level of .05.

#### Results

# **School Counselor Contacts**

Multiple logistic regression was conducted to determine which independent variables of school counselor contact (i.e., college planning, concerns about grades, goal setting), demographic variables (free and reduced lunch status and ethnicity, and perception of needed additional assistance with college topics were statistically significant predictors of enrollment at least once in a 2-year or 4-year postsecondary institution. Data screening led to the elimination of four variables as they did not indicate significant results (ethnicity, concerns about grades, goal setting, and perceptions of further need regarding postsecondary topics). Regression results indicate the overall model of seven predictors (free and reduced lunch status, ethnicity, perception of needing more assistance with college related topics, meeting with school counselors about college planning, concerns about grades, attendance and goal setting) was statistically reliable in distinguishing between students who did not enroll in postsecondary institutions and those that did (Nagelkerke  $R^2$ =.192; p < .0001). The Hosmer and Lemeshow test indicated the goodness-of-fit. Regression coefficients are presented in Table 1. Free and reduced lunch status, college planning contact, and

attendance contact with school counselors were all significant predictors of whether a student enrolled at least once in a postsecondary institution. Students who participated in free and reduced lunch programs were 33.9% less likely than those who did not participate in the program to attend college, either a 2-year or 4-year institution, within the five-year post-high school timespan. Students who met with their school counselor regarding attendance were 62.3% less likely to attend a postsecondary institution during the same timeframe. Students who met with their school counselor concerning college planning were 1.9 times more likely to attend a 2-year or 4-year postsecondary institution at least once in the five years after high school graduation than those who did not. The *Wald* statistics (44.719) support the regression coefficient significance.

Table 2 highlights the predictions the analysis made regarding whether or not a student would enroll based on the variables. The model correctly classified 69% of the cases; that means, the model predicted 69% of the cases correctly regarding whether or not a student would enroll at least once in a postsecondary institution based on the variables that were introduced in this study.

In examining the results broken down by ethnicity (Table 3), students who identify as Hispanic had lower rates of college attendance than other ethnicities, and their rates of qualifying for free and reduced lunch were much higher than other populations as well, though they did not meet with their school counselor regarding attendance at higher rates than the other groups. Almost 75% of Hispanic students qualified for free and reduced lunch. Additionally, Hispanic students were the only group from which fewer than half of the students enrolled at least once in a postsecondary institution. Table 1

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

		Postsecondary Enrollment					
	В	S.E.	95% CI				
FRL Status	413	.109	.661				
College Planning	.655	.098	1.926				
Concerns About Grades	196	.104	.822				
Goal Setting	073	.112	.930				
Attendance	549	.116	.577				
Needing More Assistance?	.095	.095	1.100				
Ethnicity							
Asian	.476	.292	1.610				
Black	.429	.159	1.536				
Hawaiian	19.867	40192.969	424611744.733				
Latino	850	.130	.428				
Native American	651	.511	.522				
Two or More	20.257	27571.848	627547235.475				
White							

Note: Free and Reduced Lunch (FRL); Needing More Assistance? = Were there parts of the college search and/or application process you felt you needed more assistance or information?

# Table 2

Predicted Enrolled at Least Once					
	Did not				
	enroll	Enrolled at	Percentage		
	once	least once	Correct		
Did not enroll once	435	433	50.1		
Enrolled at least once	252	1089	81.2		
Overall Percentage			69.0		

# Table 3

# Variable Data Analyzed by Ethnicity

		Asian	Black	Hawaiian	Hispanic	Native American	Two or More Races	White	Total
FRL Status	Not FRL	40	179	1	271	10	1	526	1028
	FRL	46	261	0	773	7	1	93	1181
College Planning	Did not meet for College Planning	31	154	0	533	9	1	230	958
	Met for College Planning	55	286	1	511	8	1	389	1251
Attendance	Did not meet about attendance	70	320	1	651	13	2	546	1603
	Met about attendance	16	120	0	393	4	0	73	606
Enrolled at least once	Did not enroll once	18	102	0	583	8	0	157	868
	Enrolled at least once	68	338	1	461	9	2	462	1341

#### Discussion

We used social capital theory as a framework and data collected by a large, urban school district to investigate the associations between school counselor contacts with student postsecondary enrollment. We studied the extent to which specific school counselor contacts might be related to subsequent student postsecondary enrollment in either a 2-year or 4-year institution. 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). This study provides new insights into the role that school counselor contacts might play in supporting students in their postsecondary goals. These findings have important implications for school counselors, school administrators, and legislators. Additionally, they also contribute much-needed data to the existing literature that examines strategic school counseling interventions and accountability in assisting students with matriculating to higher education.

#### School Counselors as a Source of Social Capital for Students

This study supported previous findings about the influence of ethnicity, 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 1.9 times more likely to enroll in postsecondary institutions within five 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, this indicates that these students tap the social capital resource available to them. Either way, this finding supports the argument that school administration and other educational stakeholders need to allow school counselors sufficient time to provide college-related services for students that can impact their postsecondary enrollment.

This study further highlights that students who met with their school counselors regarding attendance were 62.3% less likely than their peers to attend a postsecondary institution within five 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 put them into the "at-risk" category. This highlights the fact that

students who miss school may be less engaged or have other personal/social factors occurring in their lives that hinder school performance and consequently derail them from pursuing a postsecondary college education. This information brings up the topic 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).

The other variables examined were: goal setting, 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 since 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 counselor 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 may be that since it is a confusing process, even if students needed more assistance, it is possible they had already completed the correct steps for enrollment and were looking for confirmation. Though ethnicity was not found to be statistically significant, upon post-hoc analysis, there were some interesting patterns observed.

Hispanic 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 the discussion regarding specific school counselor interventions with Hispanic students and their families. In the specific sample we studied, Black students met with their school counselor to plan for college at higher rates than Hispanic students, had lower rates of participating in free and reduced lunch, and met less regarding attendance; however, their overall population was a little less than half the size of their Hispanic peers. Despite the fact that this study used ethnicity as a predictor variable, intersectionality may play a role in whether a student enrolls in a postsecondary institution, though it must be studied more indepth. Though school counselors are sources of social capital, more information is needed to identify school-based interventions that may successfully assist more Hispanic students to enroll in postsecondary institutions.

Curiously, the mean GPAs of students who did not meet with school counselors regarding attendance and college planning, while they were lower than students who did meet, were still high enough to apply to 4-year colleges and would thus also have the opportunity to enroll in a 2-year institution. The same pattern was noticed between students who qualified for free and reduced lunch and those who did not, and those who enrolled and those who did not. While those who did qualify for free and reduced lunch, 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 the mean GPAs. This leads to a discussion regarding examination of school counseling interventions that have proven successful and how they can be targeted at students who qualify but do not enroll (Pham & Keenan, 2011). This information also serves to highlight the power of social capital and bridging gaps in knowledge.

# Limitations

It must be noted that these results are only representative of the individuals who took the Senior Exit Survey in 2010. Additionally, even though exit surveys are administered throughout the country, the questions vary; thus, the results from this study cannot be directly generalized to other districts. Due to the difference between total number of participants and the number required according to G\*Power, this study is considered overpowered. Despite it being overpowered, there are advantages 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 were more fully implemented than others. It is uncertain how the level of comprehensive counseling program implementation confounds the results.

Additionally, a limitation that must be mentioned is that even though there are 3,600 2-year and 4-year postsecondary institutions that participate in providing National Clearinghouse enrollment data, there are still 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, the student postsecondary enrollment data will not appear. 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 postsecondary institutions.

Furthermore, due to the limitation 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 they met, and what was the quality of their encounter. 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.

#### Implications

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 contribute significantly to the likelihood of attending a postsecondary institution. Specifically, contact with school counselor regarding attendance is associated with a decreased likelihood in postsecondary enrollment while contact with school counselor about college planning is associated with higher likelihood of postsecondary enrollment. Though the study was exclusive to one particular school district, the demographic make-up 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 also indicate that that attention needs to be given Hispanic students and students from low-socioeconomic backgrounds in order to help them improve access to higher education. As previously discussed, more closely examining the role of intersectionality may assist in pinpointing other factors that influence postsecondary enrollment.

The reality that school counselors face with regards to caseload size and noncounseling administrative duties severely hinder the abilities they have to meet the needs of their students. The fact that these students who had met with their school counselors for

college planning showed almost two times the likelihood of attending a postsecondary institution clearly supports that school counselors can play a significant role as a source of social capital for students in postsecondary enrollment.

Because this study only examined a limited number of college-related of school counselor contacts, future studies should investigate the quality, type, and frequency of school counselor contact that positively influence students' postsecondary success. Such studies should also clearly operationalize each type of contact that goes beyond a binary data type. Researchers should also consider investigating associations among high school counselors-student contacts and college graduation rates/success as the present study only examined college enrollment that was not explicitly related to college success. Additionally, qualitative research should be done to examine some of the reasons why students with college-qualifying GPAs choose not to attend.

Findings in this study also 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 pay attention to and know how to intervene with students who have attendance issues, are at-risk of not succeeding academically, and their likelihood of attending college is significantly lower 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 service to students.

Using the framework of social capital theory, we examined specific counseling duties and their association with student postsecondary enrollment. We discovered that students meeting with school counselors regarding college related topics, in this specific school district, were 1.9 times more likely to attend a postsecondary institution within five years of high school graduation and students who met with their counselors regarding attendance were 62.3% less likely to enroll in college.

As such, it seems that school counselors have the ability to contribute to their students despite environmental factors outside of school. Additionally, it also indicates that school counselors are able to serve as sources of social capital for students, which helps student outcomes. It is imperative that school counselors self-advocate and provide intentional guidance to support at-risk populations that do not have access to social capital compared to their more advantaged counterparts. We believe our study has contributed significantly to the growing body of knowledge that supports the work of school counselors.

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#### Chapter 3

# Comprehensive School Counseling Programs and Caseload Size as Predictors of 2-Year and 4-Year Postsecondary Enrollment

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# Abstract

Based on archival data from an urban school district, this retrospective, correlational study investigated the extent school counselor-student ratios (caseload size) and comprehensive school counseling program implementation predicted high school students' postsecondary enrollment at a 2-year or a 4-year institution within three years of graduating from high school. In addition to these variables, ethnicity and GPA were included to identify other trends in the data that might not have been readily apparent. The results from multinomial logistic regression analysis showed that caseload size, three of four comprehensive school counseling program implementation groups, and some ethnicities were significant predictors of postsecondary enrollment. These findings support the notion that school counselors can serve as sources of social capital and assist students in postsecondary college enrollment.

*Keywords:* school counselors, postsecondary enrollment, comprehensive school counseling programs, caseload size, multinomial logistic regression

Since the introduction of the American School Counselor Association (ASCA) National Model in 2001, the school counseling profession across the nation has focused on data, accountability, and how to reach all students in their schools (ASCA, 2012; Marisco & Getch, 2009). The core tenets since the inception of the model have remained the same: school counselors remove barriers that prevent students from achieving academic success. School counselors do this by implementing comprehensive school counseling programs and providing appropriate services based on individual school needs by assessing school need, creating counseling curriculum that addresses the need, teaching core curriculum lessons, collaborating with other stakeholders, and planning with and counseling individual students (ASCA, 2012).

It has been demonstrated in various studies that when school counselors are able to meet with students, they positively impact students' academic, career, and personal/social outcomes. For example, Carrell and Hoekstra (2014) used regression analysis to discover that at the 23 elementary schools they examined, counselors were connected to a significant increase in academic achievement and a reduction in misbehavior in both male and female students. Akos, Mvududu, Sink, and Turnbull (2008), examined 146 middle school comprehensive counseling programs and found that students who participated in comprehensive programs for multiple years academically, outperformed their peers who did not participate for multiple years. Additionally, various other studies conducted at state level revealed that large-scale comprehensive program implementation in the schools under study were related to increases in test scores, improved grades, lowered suspension rates, and increased feelings of school connectedness (e.g., Carey & Harrington, 2010; Carey et al., 2012; Lapan, Gysbers, & Petroski, 2001; Lapan, Gysbers, & Sun, 1997). Despite the fact that these studies support school counselors and the services they provide

students, the state-level data collection format was unable to give a more in-depth perspective on what specifically school counselors did that most effectively support their students.

Though some administrators support and understand the modern school counselor, many do not. Because only 12 states have mandated school counselor-to-student ratios, unlike the strict mandates states have for teachers, many school counselors get cut from the budget, particularly when school districts face financial hardships (Hurwitz & Howell, 2014; Perna et al., 2008). School counselors are oftentimes the only trained professionals to provide academic, career, and social emotional support; and when these cuts occur, the counselor-to-student ratios rise dramatically, resulting in barriers to meeting student needs (Lapan, 2012; Martinez, 2013; Perna et al., 2008). Because school counseling positions often tend to be the first to get cut from the budget, as an advocacy measure, the school counseling profession has been pushing for uncovering more evidence and publishing more literature that support the positive impact school counselors have on student outcomes (Brigman & Campbell, 2003; Hurwitz & Howell, 2014). We hope to contribute to the literature through the present study as it investigates the extent to which the implementation of a comprehensive school counseling program and school counselor caseload size predict student postsecondary enrollment in 2-year and 4-year colleges.

In fall 2012, 66.2% of recent high school graduates enrolled in a 2-year or 4-year postsecondary institution (National Center for Education Statistics [NCES], 2015b). However, there is a large gap between those who graduate and those who move on to college. Among the many young adults who do not pursue education after high school, their lifetime earnings and career advancement are severely inhibited (Carnevale, Rose, & Cheah, 2011). As such, across the nation, there are initiatives and professional movements aimed at increasing the number of individuals enrolling in college after high school. Within this discourse, the literature appears to

consistently address the critical role that school counselors play in facilitating student career preparedness and postsecondary enrollment (Holcomb-McCoy, 2010; Perna et al., 2008; Reach Higher, n.d; Venezia & Jaeger, 2013).

#### National Support for School Counseling

As American education professionals recognize that student success is falling behind that of other developed nations, discussions regarding college and career readiness have dominated the national stage. One of the most notable proposals is the Reach Higher initiative set forth by First Lady Obama. The Reach Higher initiative focuses on supporting and encouraging each American High School student to pursue postsecondary education (Reach Higher, n.d.). In particular, this initiative recognizes and applauds school counselor contributions to students' college and career preparedness. This recognition on the national stage contributes to the legitimization of the school counseling profession ("ASCA and Reach Higher", n.d.).

Despite growing awareness and recognition that school counselors are equipped to support all students, there is still a need for more evidence that supports school counselor effectiveness, specifically on the topic of college and career preparedness (Carrell & Hoekstra, 2014). Within the school counseling profession, it is widely understood that there is a demand for more research related to how school counseling impacts student outcomes (Carey, Dimmitt, Henningson, & McGannon, 2005; Hurwitz & Howell, 2014; Paolini & Topdemir, 2013). In the current climate of data-driven programs and evidenced-based interventions, such research is crucial to supporting and protecting school counselors' roles and positions within the school systems.

#### **School-Based Social Capital Theory**

In examining the literature that focuses on student challenges in postsecondary enrollment, researchers have identified risk factors that may hinder higher educational attainment. Many of these risk factors are related to social capital that can be defined as relations and influencing connections that individuals have with others, as well as the system in which they live that impact their decisions (Coleman, 1988). Social capital is not a succinctly defined concept, and can be difficult to see without understanding the larger societal systems surrounding an individual. There are smaller, micro-level factors such as relationships and friends, as well as larger macro-level factors such as places of worship and schools. The majority of these factors overlap; however, there are reciprocal exchanges through these established multi-faceted relationships (Bryan et al., 2010; Coleman, 1988).

There are several social capital topics that consistently appear in the literature in which authors posit that they impact student postsecondary decisions. However, two stand out as particularly significant: parent/familial support and school support (Bryan et al., 2010; Perna & Titus, 2005; Stanton-Salazar & Dornbusch, 1995; Stephan, 2013). The current study addresses concerns about school support. It specifically examines school counseling programs and studentto-counselor ratios (i.e., caseload size) as being sources of social capital that potentially influence student postsecondary enrollment decisions. Comprehensive school counseling programs can be sources of social capital by providing students with information and skills that help them to make decisions and succeed. Student-to-counselor ratio can be a source of social capital by giving students more access to their school counselors.

# Social Capital Factors that Influence Postsecondary Enrollment

The two major categories of social capital factors associated with student postsecondary enrollment are familial factors and school counseling factors. Though the focus of the current study is not on familial factors, we would like to briefly discuss its literature base before reviewing the literature later.

# **Familial Factor Influencing Postsecondary Enrollment**

Parents heavily impact their children's choices regarding postsecondary education. For example, parental education level is a risk factor identified in students who do not complete high school as well as for those who finish high school, but do not enroll in college (Choy, Horn, Nunez, & Xianglei Chen, 2000). As mentioned earlier, social capital is not tangible; it is transmitted through subliminal messages in language and actions from the systems in which the student lives (Perna & Titus, 2005). Low-socioeconomic status and first-generation families oftentimes do not have experience with higher education, and tend to find it difficult to navigate the systems (Martinez, 2013). They rely heavily upon schools, more specifically school counselors, to provide postsecondary information (Holcomb-McCoy, 2010). Even then, if they do not have access to information or to a school official who speaks their home language, that can pose another barrier (Gonzalez, Villalba, & Borders, 2015). On the other hand, higher socioeconomic status families influence their children in different ways, such as parental involvement in assisting with the college application process or strategically planning curricular and extracurricular activities (Stephan & Rosenbaum, 2013).

Studies have examined the effect of socioeconomic status, in addition to specific ethnicity groups that have low rates of attending postsecondary institutions. Latino families have identified a lack of access to Spanish-speaking resources as a hindrance (Martinez, 2013). Latino and African-American students are underrepresented at the postsecondary level, and have been the focus of research in order to identify factors that can increase postsecondary enrollment. Latino students have indicated that, aspirationally, they are more likely to look for paid work as opposed to postsecondary options because of immediate family needs. Additionally, oftentimes, because of perceptions about college cost, they begin at the community college level, where they tend to get lost in the system (Outcalt, Tobolowsky, & McDonough, 2000).

An aspect of socioeconomic capital is financial literacy, especially regarding financing education and actual cost of attendance. The misconception of actual cost and the role of student loans is one of the largest challenges that students from low-income families seem to face (McDonough & Calderone, 2006; Poynton, Lapan, & Marcotte, 2015).

# **School Counselors Increasing Student Social Capital**

The school counseling profession in the United States has transformed into a full K-12 program with a curriculum that offers complementary preventative services to the school system in order to meet students' academic, career, and personal/social needs (Gysbers & Henderson, 2014; Hill, 2011). Specifically in high schools, school counselors provide core curriculum lessons in all three areas and also meet individually with students. High school counselors have the crucial responsibility to assist students with staying on track for graduation, submitting college applications, and filling out financial aid applications; especially for first-generation and marginalized students who rely more heavily on school support to complete the college application processes (Holcomb-McCoy, 2010; Lapan, 2012; Martinez, 2013; McDonough, 2005; Stanton-Salazar & Dornbusch, 2005)

Research has shown that there are a variety of school factors that impact students' decisions related to postsecondary enrollment. The work that elementary and middle school

counselors do to guide students in honing their skills that will assist them in subsequent postsecondary transitions is vital. However, for the purposes of this study, we will focus our attention on studies that specifically examined high school counseling and student postsecondary enrollment, other environmental enrollment factors, and counselor caseload size. The following four literature areas are integral to school counselor impact on student postsecondary outcomes: (a) comprehensive school counseling program outcomes, (b) high school counselor impact, (c) caseload size, and (d) other postsecondary enrollment factors.

**Comprehensive school counseling program and school counselor support.** The majority of the studies conducted examined caseload size and school counselor interventions in relation to postsecondary enrollment. Existing research findings indicate that smaller student-to-counselor ratios are associated with higher rates of postsecondary enrollment (e.g., Engberg & Gilbert, 2014; Hurwitz & Howell, 2014; Pham & Keenan, 2011). Additionally, findings indicate that when school counselors are able to meet with their students, student rates of college application completion and postsecondary enrollment increase (Belasco, 2014; Bryan, Moore-Thomas, Day-Vines & Holcomb-McCoy, 2001; Marisco & Getch, 2008; Plank & Jordan, 2001).

For example, two statewide studies found that students who attended schools with more fully implemented school counseling programs reported that college and career information was more readily available. These students also held higher beliefs that their education was helping them reach their future goals, and were more successful overall than peers who did not have access to fully implemented school counseling programs (Lapan, Gysbers, & Sun, 1997; Sink & Stroh, 2003). The researchers used hierarchical linear modeling and causal comparison, respectively, to analyze the large quantities of data. These studies highlighted the potential benefits of comprehensive school counseling programs and smaller caseload sizes. However, the data samples were quite large and dependent on individual school district collection; hence, there was the possibility of variability in information reporting, resulting in not capturing contextual characteristics of each school district. Additionally, the researchers in both of these studies did not specifically discuss how they measured the degree of school counseling program implementation at each school site. Despite the usefulness of these findings, the outcome variables examined in these studies did not include examining if these outcomes were positively connected to actual postsecondary college enrollment.

Having state, district, and administrative support to implement school counseling programs is a challenge where there are no state mandates for student-to-counselor ratios. As such, a consistent challenge that school counselors have in reaching all students is the student-tocounselor ratio (Engberg & Gilbert, 2014).

#### **High School Counselor Caseloads and Postsecondary Outcomes**

ASCA (2014) recommends a student-to-counselor ratio of 250:1; however, in reality, the average ratio in the United States is 491:1, almost double the recommended figure. In some states, this ratio is a lot higher. For example, in the 2013-2014 school year, California had an average caseload of 822:1 (ASCA, 2014). The challenges of disproportionately large caseloads are intensified in urban schools and low social capital communities because the literature highlights that school counselors are a primary source of support and information for first-generation students and students of color who tend to be in these school districts (Choy, Horn, Nunez, & Chen, 2000; Martinez; 2013; McDonough, 2006; Perna et al., 2008; Zarate & Gallimore, 2005). There are several studies that focus on counselor caseloads, postsecondary enrollments and counselor-student college planning. Many of these studies used regression methodology and archival data sets, similar to our study. Using logistic and multinomial

regression, Woods and Domina (2014) analyzed data from the Educational Longitudinal Study (ELS) of 2002 and discovered that larger counselor caseloads provided fewer opportunities for students to have individual college planning. In this study, the mean of larger caseloads was 136:1. Despite the contribution of results, the study did not factor in potential influence of comprehensive school counseling programs.

Engberg and Gilbert's (2014) results emphasize the positives of smaller student-tocounselor ratios as they found that high school counseling departments that had an average caseload of 272:1, which is close to the ASCA recommended size, and spent more than half their time on college-related topics, had higher numbers of their students enrolling in 4-year colleges. The maximum caseload in this study was 1178:1. The researchers used a hierarchical regression model to examine the 2009 High School Longitudinal Study (HSLS) data, which included about 23,000 students. This study specifically focused on the structures within schools that support postsecondary enrollment. This study only examined 4-year colleges and did not capture 2-year college enrollment.

Using regression discontinuity design, Hurwitz and Howell (2014) discovered that an additional school counselor on site and a reduction in school counselor caseloads were related to a 10% increase in 4-year college enrollment in the schools they examined. The researchers used the Schools and Staff Survey (SASS), which was administered by NCES. This study was limited to the 12 states that have specific school counselor ratio mandates and focused solely on 4-year institution enrollment. The researchers received the postsecondary enrollment data from principals. As the postsecondary enrollment data were reported from school sites, it is difficult to know if students really attended. Nonetheless, this study highlights the potential ability of school counselors to increase student social capital in relation to postsecondary enrollment.

Belasco (2013) used logistic regression to investigate relationships in the ELS data between school counselor meetings with students and subsequent postsecondary enrollment. Specifically, this study focused on school counselor support regarding college and career planning, and it revealed that students who visited their school counselor for college planning were more likely to enroll in a 4-year institution immediately after high school graduation. Despite including a solid source of postsecondary enrollment data, they only examined the fall enrollment immediately after high school graduation and excluded 2-year institution enrollment.

In addition to the previously mentioned studies, another study using logistic regression found that schools with lower caseloads, due to the presence of more school counselors, had a greater percentage of students who applied to two or more schools (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011). This study further supports the existing evidence that school counselors have a positive effect and serve as sources of social capital to help increase student social capital. Despite the clear results, Bryan et al.'s study focused on application rate and not actual college enrollment. The authors noted that the dataset they utilized did not include 2-year and/or 4-year enrollment information, which would have afforded more details.

Instead of using a national dataset like the aforementioned studies, Pham and Keenan (2011) used a large archival data set from seven high schools in a large, urban American school district. They also used a logistic regression model to focus on large student-to-counselor ratios and discovered that large student-to-counselor ratios severely impacted school counselor abilities to help first-generation and low-income students on their caseloads apply for college. The mean ratios in their study were about 320:1, with a maximum of 500:1. Their study had a total of 1,305 participants; and within this sample, they found that the larger the first-generation student-to-counselor ratio.

in a 4-year university. The results of this study support existing findings that highlight that firstgeneration and low-income students are more inclined to rely on school services to access higher education, and also the level to which school counselors can increase student social capital.

Lapan, Gysbers, Stanley, and Pierce (2012) also conducted a study using multiple regression analysis to examine student-to-counselor ratios and indicators of low-socioeconomic status in relation to student outcomes. They used state data from Missouri, as it is one of the states that implemented a statewide push for comprehensive school counseling programs. The study examined 481 schools. Though the researchers examined caseload size and student outcomes, they did not investigate postsecondary enrollment information nor identify how they measured the degree of program implementation.

In examining the findings of the above-mentioned studies, it is noteworthy that all of them support the notion that school counselors can play a role in increasing student social capital and that they can assist students in bridging social capital gaps. More specifically, the findings indicate that school counselor interventions, such as individual college planning meetings and comprehensive school counseling programs, increase student success that includes postsecondary enrollment. However, our review of the literature did not find studies that examined school counselor caseloads in combination with comprehensive school counseling programs as predictor variables in predicting subsequent enrollment in 2-year colleges. Despite limitations in the reviewed studies, the literature supports the notion that school counselors positively influence student outcomes and postsecondary enrollment.

Albeit that there is a large quantity of literature that supports school counseling and the extent to which school counselors can positively influence student outcomes, there is a scarcity of conversation regarding the potential influence of comprehensive school counseling programs

and enrollment in 2-year colleges. Though college and academic counseling are within the purview of a comprehensive school counseling program, school counselors are often not supported in providing a full focus the area deserves (Corwin et al., 2004). Hence, in order to provide evidence to support school counselor roles, it is crucial to examine the influence of comprehensive school counseling programs and their potential positive influence on student postsecondary enrollment in both 2-year and 4-year institutions.

#### **Purpose of Study**

Using social capital theory as a framework, the focus of this study was to examine how comprehensive school counseling programs and school counselor caseload serve as sources of social capital for students and how they may influence student postsecondary enrollment in a 2year or 4-year institution. The key point in the study was to examine if there were associations between the specific variables and 2-year institution enrollment and also 4-year institution enrollment as two separate outcomes. Despite it being similar to previous studies using regression analysis, there were differences in the variables used in the present study that we believe to address a gap in the literature. The first was that comprehensive school counseling programs were measured and examined by individual school sites using a list of indicators based on the ASCA National Model (2012) as opposed to assumption of implementation or researcher interpretation. The second was the expansion of the postsecondary enrollment definition to include 2-year college enrollment as opposed to only 4-year colleges, as is used in most existing studies; and student enrollments in 2-year and 4-year institutions were examined as separate outcomes. The third was that the dataset came from a large, urban school district that embraces and strongly supports the ASCA National Model implementation at each school site. The last significant difference in this current study was that it examined 2-year or 4-year institution

reported enrollment during the first three years after high school graduation based on results from the NSCH, instead of self-report data regarding immediate 4-year college enrollment after high school. In addition to the aforementioned variables, ethnicity was another variable included in order to gain more understanding on potential trends within the sample population as research has found that underrepresented students struggle to enroll in college (Knight-Diop, 2010).

We believe the present study contributes to the literature in several ways. First, for many reasons, various high school graduates choose not to pursue college immediately following graduation though they are qualified; but decide to enroll a few years later. Thus, the current study's attempt to capture college enrollment three years after graduation is likely to expand the knowledge on previously examined postsecondary enrollment data. Second, the focus of our study addressed limitations in most existing studies on postsecondary enrollment as it expanded postsecondary to include 2-year or 4-year institutions. Third, findings in the current study may also serve to support the usefulness of comprehensive school counseling program implementation. Lastly, our findings may provide more evidence to the school counseling profession and its advocates, such as ASCA, to support their advocacy focus and policy recommendations.

Based on social capital theory and the aforementioned existing literature, the research question that guided the current study was: To what extent does comprehensive school counseling program implementation and school counselor caseload size predict 2-year college enrollment and 4-year college enrollment? Our null hypothesis was: Regardless of comprehensive school counseling program implementation evaluation scores and school counselor caseload size, there is an equal chance of 2-year college enrollment, 4-year college enrollment, and no college enrollment.

#### Method

### Design

The chosen design for this study is a retrospective, correlational study that uses multinomial logistic regression to analyze an archival dataset that contains postsecondary enrollment, caseload size, and comprehensive school counseling program implementation evaluations. Multinomial logistic regression does not assume a normal distribution of the predictor variables. It is appropriate for this study because comprehensive school counseling program and caseload size are ordinal variables. Additionally, it is appropriate because 2-year, 4year enrollment, and no enrollment were examined as three separate discrete outcomes.

The data collected came from 14 traditional high schools within the district. There were other schools in the district; however, they were charter schools that did not participate in the district data collection.

#### **District Information**

The school district studied is a large, urban school district in a Western state in the United States that includes urban and suburban areas. For context, the total K-12 enrollment in October 2011 was 81,870. Regarding socioeconomic status, this school district qualifies students for free lunch if their family earns less than approximately \$30,600 for a family of four, and reduced lunch if their family earns less than approximately \$43,500 for a family of four. During the 2011-2012 school year, this school district had a 66% free and reduced lunch rate. As such, more than 54,034 students in the district qualified for free or reduced lunch.

The district follows the ASCA National Model (ASCA, 2012) and encourages comprehensive school counseling program implementation at each site. Both school counselors and their programs are evaluated based on the National Model. As a way to provide district-wide support for comprehensive school counseling programs, the school district provides districtcreated core curriculum lessons on financial literacy, goal setting, academic progress, and career goals each year. All of these lessons are mandatory, and are given at each grade level. School counselors have the freedom to supplement this information based on the needs of their school.

### **Participants**

The participants in this study were high school seniors in 14 traditional high schools in this urban school district during the 2011-2012 school year. We selected these schools as they were all the high schools in the district for which we had complete data, and we wanted to include all eligible students in the study.

**National Student Clearinghouse Data.** National Student Clearinghouse (NSCH) Data is information that is collected from over 3,600 colleges and universities, both private and public. Membership in the Clearinghouse is open to any post-secondary institution that participates in the Federal Title IV program. Essentially, if they participate in federal financial aid, they are eligible. The data include degrees obtained and enrollment in postsecondary institutions (National Student Clearinghouse, n.d.). School districts receive the postsecondary enrollment information annually.

**District data.** Student data that have been known to impact achievement and postsecondary enrollment, such as ethnicities were provided by the district as well. The district collects this type of demographic information to make informed decisions and provide extra services as necessary. We include data on ethnicity in our analysis. We were not able to obtain student specific free and reduced status information from the district.

#### Procedures

A de-identified dataset was obtained from the school district's research department after submitting a research proposal. Information from the district included whether or not students enrolled at least once in a 2-year postsecondary institution in the subsequent three years after graduation (yes or no); and enrollment at least once in a 4-year postsecondary institution in the subsequent three years after graduation (yes or no). Furthermore, ethnicity was used as a variable in order to examine trends within the data.

#### **Predictor Variables**

**Comprehensive school counseling program evaluations.** The level of implementation of each comprehensive school counseling program was measured by the evaluations that school counselors in these schools conducted on their programs. These evaluations (see Appendix A) are aligned with the ASCA National Model (ASCA, 2012). They provide the framework the district uses to assess their schools' implementation of a comprehensive school counseling program. We used the evaluations each school had reported in the 2011-2012 school year.

The score for each school site was calculated by totaling the numeric value assigned to each indicator in the evaluation. The evaluation uses a grid format with components of a comprehensive school counseling program listed on the left. At the top of the grid are four indicators on the degree of implementation of each element. Using the form, school counselors indicate where their program is regarding implementation of each specific component. The anchors for the degrees of implementation and scoring were as follows: "Elements Not Yet Begun", or no implementation (0 points); "Elements in Progress", or beginning to implement (1 point); "Elements in Place", or somewhat implemented (2 points); and "Elements Implemented Systematically", or fully implemented (3 points). The lowest possible total score was 0 and the highest 69. That means, the higher the total points scored, the higher the level of comprehensive program implementation. Such levels were assumed to be ordinal in nature. Based on visual inspection, we grouped the schools into four groups representing four levels of program implementation: low scores (10-27), medium-low scores (33-35), medium-high scores (37-43), and high scores (46-52).

**Caseload.** Caseload (counselor-to-student) ratios were determined by the total number of students in the school divided by the number of school counselors. School counselors in this district did not have caseloads by grade level; their load was assigned by splitting students' last names alphabetically. Thus, each school counselor had seniors on their caseload.

**Ethnicity.** The demographic breakdown of the final study sample is 5.3% Asian, 11.8% African-American/Black, .15% Hawaiian/Pacific Islander, 60.3% Hispanic/Latino, 1% Native American, 2.6% two or more ethnicities, and 18.6% White. This breakdown is representative of the district at large. This breakdown pertains only to the 1,919 individuals who were enrolled in schools with completed comprehensive school counseling program evaluations during the 2011-2012 school year.

#### Analysis

A multinomial logistic regression was performed, with binary and multinomial variables, using Statistical Package for Social Sciences (SPSS) to assess the probability of counselor caseload size and comprehensive school counseling program in predicting 2-year college enrollment and 4-year college enrollment. A .05 alpha level was selected as the significance threshold. In addition to these variables, ethnicity was included to assess its relative contribution to the outcome response. The National Clearinghouse postsecondary data were recoded in order to condense the information. As there were three years of postsecondary enrollment data, they were recoded to create three distinct outcomes. The first outcome reflects enrolling at least once in a 2-year institution in the three years after high school, the second outcome reflects enrolling at least once in a 4-year institution in the three years following high school, and the third outcome is no enrollment recorded at all.

#### Results

Multinomial logistic regression was conducted to determine the extent comprehensive school counseling program evaluation, counselor caseloads and ethnicity significantly predicted enrollment in a 2-year institution and enrollment in a 4-year institution. Caseload sizes, certain ethnicities, and evaluation scores were found to be significant. Regression results indicated that the overall model of three predictors (ethnicity, caseload size, and comprehensive school counseling program evaluation) was statistically reliable in distinguishing among students who enrolled in a 2-year institution, a 4-year institution, and those who did not enroll (Nagelkerke  $R^2$ =.153; *p* < .0001). According to the likelihood ratios tests of Chi-square, the model significantly predicts group membership (Table 1).

Table 1

#### Likelihood Ratio Tests

Effect	Chi-Square	df	Sig.
CaseloadSize	63.027	2	.000
Evals	64.469	6	.000
Ethnicity	95.818	12	.000

### **Two-year Institutions**

The results for 2-year institution enrollment outcomes and predictor variables are shown in Table 2. Students who were on larger caseloads were .3% less likely to attend a 2-year institution than attend. Asian students were 2.4 times more likely to attend a 2-year institution than not attend. Black students were 2.2 times more likely to attend a 2-year institution than not attend. Hispanic students were 1.4 times more likely to attend a 2-year institution than not attend. Hispanic students were 1.4 times more likely to attend a 2-year institution than not attend. The other ethnicities were not found to be significant predictors.

Overall, students in these comprehensive school counseling programs were more likely to attend a 2-year institution. Specifically, students in the low-score group were 2.5 times more likely to attend a 2-year institution than not attend; those in the medium-low group were 3.2 times more likely; and those in medium-high group were 1.6 times more likely (Table 2). The *Wald* statistics support the regression coefficient significance. Students from schools with lower comprehensive school counseling program scores (low and medium-low score groups) had a higher likelihood of attending a 2-year institution than those in programs with higher implementation scores (medium-high). Surprisingly, the high-score programs were not associated significantly with their students attending 2-year institutions.

#### Table 2

		В	Wald	Sig.	Exp(B)
2-year	CaseloadSize	003	33.582	.000	.997
	[Evals=Low score]	.925	27.440	.000	2.523
	[Evals=Medium-Low]	1.166	44.706	.000	3.209
	[Evals=Medium-High]	.502	7.864	.005	1.651
	[Evals=High score]	$0^{\mathrm{b}}$			
	[Ethnicity=Asian]	.909	9.294	.002	2.482
	[Ethnicity=Black]	.793	12.375	.000	2.210
	[Ethnicity=Hawaiian]	1.087	.552	.458	2.966
	[Ethnicity=Hispanic]	.396	4.814	.028	1.486
	[Ethnicity=Native Am.]	-1.055	1.013	.314	.348
	[Ethnicity=Two or More Races]	.137	.097	.755	1.147
	[Ethnicity=White]	$0^{\mathrm{b}}$			

Logistic Regression Analysis Predicting Postsecondary Enrollment at Least Once in a 2-year Institution (N=1,919)

*Note*. Evals=Evaluation.

#### **Four-year Institutions**

The results for 4-year institution enrollment outcomes and predictor variables are shown in Table 3. Students who were on larger caseloads were .4% less likely to attend a 4-year institution than attend. Hispanic students were 66% less likely to attend a 4-institution than attend. The other ethnicities did not indicate to be significant predictors.

The medium-low and medium-high score groups were significant predictors of whether students attended a 4-year institution. Students whose schools had medium-low comprehensive program evaluation scores were 2.1 times more likely to attend a 4-year institution than not attend. Students whose schools had medium-high comprehensive program evaluation scores were 1.5 times more likely to attend.

The low-score and high-score groups were not significant in predicting the probability of attending a 4-year institution. The *Wald* statistics support the regression coefficient significance. Table 3

Logistic Regression Analysis Predicting Postsecondary Enrollment at Least Once in a 4-year Institution (N=1,919)

		В	Wald	Sig.	Exp( <i>B</i> )
4-year	CaseloadSize	004	45.696	.000	.996
	[Evals=Group A]	.100	.209	.647	1.105
	[Evals=Group B]	.764	18.125	.000	2.148
	[Evals=Group C]	.427	5.740	.017	1.533
	[Evals=Group D]	$0^{\mathrm{b}}$			
	[Ethnicity=Asian]	.245	.857	.355	1.278
	[Ethnicity=Black]	190	.805	.370	.827
	[Ethnicity=Hawaiian]	.372	.067	.795	1.451
	[Ethnicity=Hispanic]	-1.078	46.687	.000	.340
	[Ethnicity=Native Am.]	810	1.557	.212	.445
	[Ethnicity=Two or More Races]	.066	.038	.846	1.069
	[Ethnicity=White]	$0^{\mathrm{b}}$			

*Note*. Evals=Evaluations.

Table 4 highlights the analysis predictions made regarding whether or not a student would enroll based on the study variables. The model correctly classified 59.9% of the cases; that means, the model predicted 59.9% of the cases correctly regarding whether or not a student would enroll at least once in a 2-year institution or at least once in a 4-year institution based on the variables that were introduced in this study. It should be noted that the model most correctly predicted No Enrollment (92.4% correct) and 4-year institution enrollment (24.9% correct).

### Correct 2-year institution enrollment predictions were much lower than the accurate 4-year

institution predictions.

#### Table 4

Predicted Enrolled at Least Once

			Predicted	l
Observed	2-year	4-year	None	Percent Correct
2-year	9	39	365	2.2%
4-year	3	93	277	24.9%
None	23	63	1047	92.4%
Overall Percentage	1.8%	10.2%	88.0%	59.9%

Interestingly, during the data analysis process of this process, information regarding postsecondary enrollment and GPA data was uncovered. Of the 1,919 students who were examined, 59% of them, or 1,133 students, did not enroll once in a 2-year or 4-year institution in the three years after high school.

Table 5 shows a breakdown by ethnicity of total numbers enrolled or not enrolled in a postsecondary institution. It is interesting to note that of the ethnicities, that have populations of more than 100 students, Hispanic students were the only category to have the majority not enrolled in a postsecondary institution. Hispanic students were also the major ethnic group in the sample, with a total of 1,158 students of the 1,919 total sample. The GPAs of the students who did not enroll were comparable to the mean GPAs of students who enrolled in 2-year institutions. It is difficult to ascertain some of the reasons why students decided to enroll versus those who chose not to enroll, especially if their GPAs qualified them for 4-year universities in addition to 2-year institutions.

#### Table 5

	Mean	-	2-year	4-	year	1	None	Т	otal
	GPA	Count	%	Count	%	Count	%	Count	%
Asian	3.18	28	27.2%	36	35.0%	39	37.9%	103	100.0%
Black	2.39	68	30.0%	53	23.3%	106	46.7%	227	100.0%
Hawaiian	2.77	1	33.3%	1	33.3%	1	33.3%	3	100.0%
Hispanic	2.55	253	21.8%	137	11.8%	768	66.3%	1158	100.0%
Native Am.	2.30	1	5.0%	3	15.0%	16	80.0%	20	100.0%
Two or More Races	3.06	8	16.0%	17	34.0%	25	50.0%	50	100.0%
White	3.18	54	15.1%	126	35.2%	178	49.7%	358	100.0%

Enrollment in 2-year and 4-year Institutions by Ethnicity with Mean GPA

#### Discussion

Based on social capital theory, we expected that comprehensive school counseling program level and counselor-to-student ratio (caseload size) would significantly predict the likelihood of students' college enrollment in 2- and 4-year colleges upon high school graduation within three years. We investigated this using data collected by a large, urban school district. Findings in this study partially supported our expectations.

This study supported previous literature regarding the influence of ethnicity and school support services on students' enrollment in postsecondary institutions (Cates & Shaefle, 2011; Martinez, 2013; McDonough, Outcalt, & Tobolowsky, 2000; Stanton-Salazar, 1995). Overall, the results of this study contribute to the field of school counseling as they support the ASCA National Model and smaller caseload sizes as variables that can play a role in positively contributing to student postsecondary enrollment.

Findings indicate that students in this school district who were at schools with mediumlow and medium-high comprehensive program evaluation scores showed correlations with increased enrollment in 4-year institutions. Interestingly, the high-score group was not a significant predictor as we had expected. The high-score group had the largest numbers of Hispanic students, at 484, which is almost 200 students more than the next highest group, the low-score group, at 285. These are also the two groups that were not significant predictors of 4vear institution enrollment. Hispanic students in this study were 66% less likely to attend a 4year institution than attend. It is plausible that the high-score group's overall significance as a predictor for postsecondary college enrollment was confounded by the large number of Hispanic students who did not further their studies in postsecondary institutions. This corroborates with findings in the literature that indicate Hispanic students tend to struggle in matriculating to postsecondary institutions (Evans, Zambrano, Cook, Moyer, & Duffey, 2011; Martinez, 2013). Though this study used ethnicity as a predictor variable as previous literature highlights this as a factor, the role of intersectionality may prove beneficial in order to specifically identify other factors that might influence postsecondary enrollment. For example, examining ethnicity combined with low socioeconomic status, and how those two factors influence postsecondary enrollment, instead of viewing them as separate categories. Despite the potential influence of intersectionality, the results of this study highlight a need for school counselors to pay attention to this student population and provide specific interventions that meet the needs of Hispanic students and their families, in addition to the interventions they already provide to all students.

Additionally, findings indicate that students in this school district who were at schools in the low-score group through the medium-high score group showed overall correlations with increased enrollment in 2-year institutions. In this study, Asian students, Black students, and Hispanic students were ethnic groups that indicated significance relating to 2-year institution enrollment. Asian students were 2.9 times more likely to attend than not and Black students were 2.5 times more likely to attend than not. In direct contrast to their likelihood of 4-year institution enrollment, Hispanic students were 1.5 times more likely to attend a 2-year institution than not. These findings lead to a discussion regarding the reasons these specific groups shows a correlation with 2-year institution attendance versus 4-year institution attendance despite their GPAs qualifying. Another question this information raises is whether or not these students continue on to transfer to a 4-year institution, or if they participated in one of the vocational programs the community colleges offer. Despite the questions, these findings suggest that school counselors who implement comprehensive school counseling programs can potentially positively influence subsequent student postsecondary enrollment.

As previously mentioned, it is surprising that the trend of significance found in mediumlow scores and medium-high scores was not continued in the high-score group. It is within reason to expect that there might be some environmental factors that were unaccounted for in this study that contributed to this unexpected finding. Furthermore, the study variables were only able to predict 59.9% of the cases. It will be worthwhile to examine if other school support variables will further increase the likelihood of prediction. As free and reduced lunch data was unable to be obtained for this study, low-socioeconomic status might be a factor in students at these schools being less likely to attend a postsecondary institution. Follow-up studies are needed to help ascertain the factors that account for why school counseling programming in high-score group did not significantly predict the likelihood of their students attending 2-year or 4-year institutions. Regarding caseload size, though the likelihood of not attending a postsecondary institution due to large caseload sizes was relatively small, it was still found to be a significant predictor. As will be mentioned in the limitations, it is difficult to ascertain quality, frequency, and duration of the counselor-student interactions. As such, despite smaller caseload sizes indicating significance as predictors of postsecondary enrollment, follow-up studies will need to focus on the type and quality of counselor-student interactions in order to more fully understand the dynamics that may influence outcomes.

It is important to also discuss the mean GPAs for students who did not attend a postsecondary institution. Though the mean GPAs of those who did not attend a postsecondary institution were lower than those who attended 4-year universities, they were very similar to those of students who attended a 2-year college. The GPAs qualified many students for a 4-year institution, and certainly for 2-year colleges. This raises questions about challenges and obstacles students face when deciding to matriculate to a postsecondary institution. The literature identifies that low-social capital can have an affect on students matriculating, and through the lens of social capital theory, this may play a factor in the 4-year postsecondary matriculation rates in this study (Bozick & DeLuca, 2011; Pham & Keenan, 2011). This leads to a discussion regarding school counseling interventions that may help support students and their families in postsecondary matriculation decisions, in addition to follow-up studies on students who qualify but do not enroll in postsecondary institutions. This information serves to highlight the role school counselors can have in bridging social capital for students and their families as they navigate the postsecondary process.

#### Limitations

It must be noted that the results are only representative of the students who were enrolled at schools that had school counseling program evaluations and caseload size information for the 2011-2012 school year in the district under study. Despite the fact that other school districts evaluate their counselors and counseling programs, the school counseling program evaluation was specific to this school district, and thus cannot be directly generalized to others. Though there are four district mandated classroom guidance lessons at each grade level, it is difficult to know how they were integrated into the counseling program evaluations.

In addition, another limitation that must be mentioned is the National Clearinghouse enrollment data. Despite the fact the organization receives information from over 3,600 postsecondary institutions, there are still schools that do not participate; such as international schools and certain trade schools that do not receive federal financial aid. Thus, some students who were enrolled in a postsecondary institution might not have been accounted for in the data.

Furthermore, due to the limitation of the data collected, it is difficult to ascertain the quality of interactions school counselors had with their students as a result of caseload sizes. It is thought that school counselors with smaller caseloads are able to see their students one-on-one more frequently than school counselors with larger caseloads; however, with the data collected, it is difficult to know if this is the case. The district was unable to provide free and reduced lunch data for this dataset, which hindered our ability to examine the role of socioeconomic status with the predictor variables and on postsecondary enrollment.

As this dataset was three years of postsecondary enrollment data, and we were focused on just enrollment, we were unable to examine graduation rates. Though there were some individuals who successfully transferred to a 4-year institution, there was not enough information to include transfers and graduation as outcome variables. Lastly, as this was a correlational study, findings do not show causality.

#### Implications

This study has several implications regarding the benefits of comprehensive school counseling programs and smaller caseload sizes on students' postsecondary enrollment. For many students, school counselors can be sources of social capital and can help students increase their levels of social capital by acting as bridges and providing them skills to navigate complex systems. Despite the fact that there are many environmental factors that influence students' decisions to attend a postsecondary institution, this study highlights the positive influence school counselors can have on them. Though the study was exclusive to this particular school district, as a large urban district, its makeup is not unique. The findings of this study point to the need for school counselors to be able to provide comprehensive counseling programs to their students, and for school districts to hire more school counselors as caseload sizes influence postsecondary enrollment. This is particularly important with schools that have high numbers of at-risk populations. With administration and school districts taking away administrative duties currently placed on school counselors, school counselors would be able more fully implement comprehensive counseling programs and develop programs that provide at-risk students with more support and potentially increase the likelihood of postsecondary enrollment.

An implication for counselor educators who train school counselors would be the emphasis on data collection and on the ASCA National Model as a foundation of support for all students. The school counselors who create this foundation, and collect data on their impact, are serving to further the school counseling profession by demonstrating the positive impacts school counselors have on student outcomes. Implications for practicing school counselors are to continue using the best practices they learned in graduate school, implement the ASCA National Model, and collect data to support their interventions. Large-scale change can be difficult, but if school counselors in the field are using data to make changes in their districts, it serves the larger profession.

Implications for future research would be to examine reasons for high-score specific comprehensive school counseling programs to not show correlations with postsecondary enrollment. As this study unexpectedly showed that high-score implementation did not have a significant relationship with either 2-year or 4-year institution enrollment, this would be important to examine. Additionally, focusing on quality, frequency, and duration of school counselor-student interactions and potential influences on postsecondary enrollment would be another area to study. In finding out this information, we would be able to train school counseling graduate students which types of interventions prove more effective. As we now know that there are some positive influences regarding more fully implemented school counseling programs, it would be interesting to more closely examine program lessons and topics, in addition to using a standardized program evaluation completed by an independent evaluator, instead of self-report evaluations.

#### Conclusion

Using the framework of social capital theory, we examined the probability comprehensive school counseling programs and school counseling caseload sizes had in predicting student college enrollment. For the most part, this study supported our hypothesis that schools with more fully implemented comprehensive school counseling programs and smaller caseloads had higher numbers of students attending postsecondary institutions; the exception being that the highest scores were not associated with significant college enrollment. Our

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findings add to the existing evidence that support the argument that school counselors and school counselor interventions can positively contribute to student success despite environmental challenges they may encounter. Additionally, this study highlights the importance of providing knowledge and interventions to all students as a way of increasing student social capital. Further research needs to be done to closely examine specific aspects of comprehensive counseling programs that may further assist students to matriculate to higher education.

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#### **Chapter 4: General Conclusions**

This chapter summarizes the two dissertation research studies that examined the associations among high school counseling related variables and studetns' subsequent postsecondary college enrollment. These studies were designed to assess relationships among school counseling interventions and 2- and 4-year institution enrollment within five years of high school graduation in the first study, and three years in the second. Participants in both studies were students in an urban school district in a Western state in the country. The first sample consisted of 2,209 high school seniors who graduated in 2010. The second sample consisted of 1,919 high school seniors who graduated in 2012. Both of these samples' postsecondary enrollment information was tracked annually after high school graduation, beginning with the summer immediately after they graduated. Enrollment data came from the National Student Clearinghouse (NSCH) that receives enrollment information from higher education institution participate in federal financial aid. Enrollment was counted if the individual enrolled in at least one term of education at a 2-year or 4-year institution. Both studies were retrospective, correlational investigations utilizing logistic regression analysis.

#### **Summary of Manuscript I**

The first study was an outcomes study looking at postsecondary enrollment based on the types of contact they had with their school counselor and student demographics. The multiple logistic regression analysis showed that the model was able to correctly predict 69% of the outcomes. Results indicated that participants who met with their school counselor for college planning and college-related topics were 1.9 times more likely to attend a 2-year or 4-year institution at least once five years after graduation than their peers who did not meet with their school counselor to plan for college. These findings indicate that college planning with school counselors supports the argument that school counselors provide services that contribute to student postsecondary college enrollment outcomes.

This study also indicated that students who met with their school counselors regarding attendance were 62.3% less likely to attend a 2-year or 4-year institution at least once. This indicates that students who encounter challenges attending school regularly may be at a disadvantage for matriculating to postsecondary education.

Additional analyses of the data showed that three times as many Hispanic students in the sample qualified for free and reduced lunch than those who did not. Hispanic students were also the only ethnic group who had less than half of the population met with a school counselor regarding college planning. Additionally, they also attended a postsecondary institution at lower rates than all other groups. This information corroborates with findings in the literatures that indicate that students from low socioeconomic statuses and traditionally underserved communities do not attend college at the same rates as their peers (Stanton-Salazar & Dornbusch, 1995).

While encouraging, limitations to this study do exist. First of all, the correlational nature of the study precludes conclusion of causation, though it allows for outcome predictions. Second, our predictor variables did not allow us to ascertain the quality of the contact students had with their school counselors. Third, the limited availability of postsecondary information presented another limitation. Higher education institutions only participate in the National Student Clearinghouse data if they participate in federal financial aid or choose to participate. Students might have enrolled in postsecondary institutions that chose not participate, or those that did not receive federal financial aid, such as schools abroad. It was uncertain to what extent this might have impacted the findings.

#### **Summary of Manuscript II**

The focus of the second study was to examine how comprehensive school counseling program implementation and school counselor caseloads could be sources of social capital for students in relation to their postsecondary college enrollment. The study specifically examined the extent to which comprehensive school counseling program levels and counselor caseloads predicted student postsecondary college enrollment three years post high school graduation.

Multinomial logistic regression analysis showed that the model correctly predicted 59.9% of the cases. Results indicated that students on larger caseloads were .3% less likely to attend a 2-year institution and .4% less likely to attend a 4-year institution. These findings do not appear to be significant numerically, but they were statistically significant.

Regarding comprehensive school counseling program implementation, there were four groups of scores: low-score, medium-low score, medium-high score, and high-score. The lowscore group was 2.5 times more likely to attend a 2-year institution than not attend; medium-low score group was 3.2 times more likely; and medium-high score group was 1.6 times more likely. Only medium-low and medium-high score groups were found to be significant predictors of 4year institution enrollment. The medium-low score group was 2.1 times more likely to attend a 4-year institution than not attend, and the medium-high score group was 1.5 times more likely to attend. Despite the trend, the high-score group was not found to have a significant correlation with enrollment in a 2-year or 4-year institution.

In terms of ethnicity, Asian students were 2.4 times more likely to attend a 2-year institution than not attend; Black students were 2.2 times more likely to attend; and Hispanic students were 1.4 times more likely. Hispanic students were found to be 66% less likely to attend a 4-year institution than attend. The other ethnicities were not significant predictors.

Similar to Manuscript I, there were limitations in this study. One limitation was the inability to generalize the results to other districts as the school counseling program evaluations used were specific to this district. Furthermore, this is a correlational study that does not allow for drawing causal conclusions. Another limitation was related to the postsecondary enrollment information that was only available from colleges that participated in the National Student Clearinghouse. Students who attended postsecondary institutions that were not required to participate in this data organization were not included in the data. Lastly, the study only examined no enrollment, 2-year, or 4-year postsecondary college enrollment as outcome variables. College enrollment cannot be equated with college graduation. Hence, interpretation of the findings cannot be extrapolated to college success.

#### **Implications and Recommendations**

In reviewing the outcomes of both manuscripts, several implications seem evident. The findings in both of the studies in this dissertation project support school counselor interventions and school counseling programs at the school district under study as well as adding to the

growing body of knowledge that support the importance and relevance of the role school counselors play in student outcomes. The findings highlight school counselors and school counseling interventions as sources of social capital for students (Bryan et al., 2011; McDonough, 2006a). These findings help to legitimize the school counseling profession (Bemak & Chung, 2008; Lapan, 2001). It is hoped that school administrators will give full support to the school counselors and school counseling programs and not readily cut school counseling personnel and programs in times of financial difficulties.

In terms of practice and training, practicing school counselors and school counselor preparation programs should pay attention to the importance of school counseling interventions and services as important sources of social capital to students, especially in relation to students' postsecondary college enrollment. School counselors should continue to find ways to help students succeed in postsecondary education matriculation; for example, helping students who qualify academically to go to college, but for some reasons do not. School counselors need to also pay attention to students they meet due to attendance issues because these students are likely to be at-risk of not advancing to college. Additionally, school counselors need to find ways to develop interventions that effectively address needs of specific ethnic populations such as Hispanic students who have been repeatedly highlighted in the research to be an at-risk group (Stanton-Salazar & Dornbusch, 1995).

In terms of research, an area that needs more investigation or clarity is the quality, frequency, and duration of school counselor-student contacts that provide the most impact on student success outcomes. Though in both manuscripts certain types of school counseling interventions were found to significantly correlate to postsecondary enrollment, focusing on what makes those interventions particularly influential would benefit the literature.

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Both manuscripts highlighted the fact that the mean GPAs for students who did not attend postsecondary institutions, would have been enough to qualify for 4-year institution admittance. As such, researchers could conduct a qualitative study on potential reasons why students with qualifying GPAs for 4-year institutions decide not to enroll in either a 2-year or 4-year institution.

Additionally, particularly as follow-up for Manuscript II, it would be important to examine the factors that may explain why fully implemented school counseling programs do not seem to predict postsecondary enrollment as expected. Focusing on specific aspects of the foundation, delivery, management, and accountability pieces of the ASCA National Model (2012) might be able to pinpoint reasons for more fully implemented programs not showing associations with higher rates of postsecondary enrollment. This will help inform program improvement.

Future studies should also examine how school counseling interventions and programs influence college graduation rates. Furthering research in these areas may contribute to the school counseling profession in general, and the young adults served in particular. The ultimate goal is to serve as sources of social capital, assist students to succeed academically, and help them reach their postsecondary goals.

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June 29, 2015

Your research project, **Impact of School Counseling Duties on College Enrollment**, has been reviewed and approved by the **School Counseling** Research Review Board for implementation based upon the following conditions:

- 1. The voluntary nature of the study is made clear to all potential participants including pupils, teachers, and administrators. *Final approval for the study is contingent on the principals, students, and parents' agreement to participate.*
- 2. The researchers agree to maintain the anonymity of the research participants as outlined in your proposal.
- 3. All rules in the district's research procedures are followed including maintaining the anonymity of the district, the schools, and the study participants.
- 4. If your request involves the release of data you agree to limit the use of said data to the terms specified in your application. The data will not be released to any third party and you agree not to copy, reproduce, disseminate transmit, license, sublicense, assign, lease, or release the data to any other party. All data should be maintained in a secure fashion with access being restricted to the persons identified in the research application to prevent unauthorized use of the data. Following the use of the data for the prescribed reasons the data should be destroyed.
- 5. This letter does not reflect a commitment on behalf of Denver Public Schools towards the requestor. At any point, the approval status involving the release of data or access to students/staff for research may be withdrawn. A violation of any of the conditions within

this letter and/or deceptive practices by the researcher will lead to immediate termination of all research privileges. Furthermore, the release of future data and/or research privileges may be indefinitely terminated.

- 6. A report of the findings is made available to the Department of Accountability, Research & Evaluation at the conclusion of the study.
- 7. This letter is returned by mail, email to **example 1**, or via FAX **example** prior to initiating your study with the requestor acknowledging agreement with the terms described above by signature.

Please contact Accountability, Research & Evaluation at guestions.

## Please return this letter with the following statement verified by signature:

I, \_\_\_\_\_, agree to abide by the conditions described in this document and will carry out my research practices in accordance with those conditions. I assume complete responsibility for the described study and will work according to best-practices when working with \_\_\_\_\_\_ data and/or conducting scientific inquiry within the \_\_\_\_\_\_ district.

Signature of Requestor

Request ID: 393

# Appendix B

# High School Exit Survey

\*1. Have you participated in any of the following programs during high school? (check all that apply)

		AVID
		Uplift
		TRiO Educational Talent Search
		GEARUP
		I Have a Dream
		UCD Pre-Collegiate Program
		Upward Bound
		I have not participated in any of these programs.
1		
*2.	Wha	t is the highest level of education your mother/female guardian has completed?
	(S	elect answ er)
2	2	
*3.	W/bc	
	VVIId	t is the highest level of education your father/male guardian has completed?
		it is the highest level of education your father/male guardian has completed?
3	(S	
	(s	
	(s What	elect answ er)
	(s What	elect answ er)  t are your plans for the fall?

5. If attending a post-secondary institution (i.e. college, technical school, etc.), please tell us the name of the school you'II be attending:

5
*6. Did you complete the Early Achiever's Scholarship application in either 8th or 9th grade?
C Yes <sup>C</sup> No
6
*7. How many scholarships have you applied for?
7
*8. How many scholarships have you been awarded? Total dollar amount?
8
*9. How many post-secondary institutions have you applied to?
9
*10. I made use of the Future Center:
(select answer)
*11. I have met with my School Counselor about: (check all that apply)
Concerns about grades
Study skills
Attendance
Goal setting
Test-taking skills
Specific programs (Balarat, Internships, etc.)
College planning/applications/essays/scholarships
Problems with teachers
Parent issues
Friendship struggles
Bullying
Concern for friends
Personal issues
I did not meet with my School Counselor.
11

\*12. While in high school I participated in the following: (check all that apply)

	Athletics
	Activities (Student Council, debate, etc.)
	Art
	Clubs
	Dance
	Destination Imagination
	History Day
	Music programs (i.e. band, choir)
	Shakespeare
	Theatre programs (i.e. drama, stage design)
	Other
	I did not participate in any extracurricular activities
12	
	at college planning programs did you attend? (check all that apply)
	Career fair
	College admission high school visit
	College admissions process information
	College campus visit
	In-state college fair
	Financial aid information session
	Out of state college fair
	I did not attend any programs
13	
*14. Whi	ch of these resources did you utilize in your college search and application process? (check all that apply)
	College in website
	College information (on shelves)
	College videos
	College websites
	Computers in counseling office, or Future Center
	Future Center Advisor
	Family Connection in Naviance
	Field trips and/or visits to college campuses

## COLLEGE ENROLLMENT AND HIGH SCHOOL COUNSELING

General guide books (Peterson's, Fiske, Rugg's, etc.)

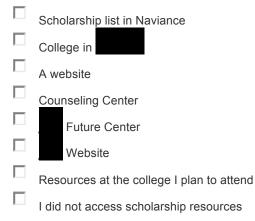
- Meetings with college representatives
- Military information
- School Counselor
- Testing information (ACT/SAT)
- □ I did not utilize any of these resources

## 14

15

\*15. Were there parts of the college search and/or application process you felt you needed more assistance or information?

\*16. What resources did you use to find scholarship information? (check all that apply)



# Appendix C

## **Counseling Department Review**

School: \_\_\_\_\_ Date: \_\_\_\_\_

As a department, please discuss these elements with Director of Counseling during site visit. Be prepared to give electronic copies of elements.

ASCA Model Elements	Elements not yet begun	Elements in progress	Elements in place	Elements implemented systematically
			You have this and can show evidence. Evidence aligns with 3,4 or 5 score on RAMP rubric, or with national best practices.	Every Counselor actively uses this (cite and demonstrate examples)
Counseling department mission statement			•	
Counseling department philosophy & beliefs				
At least 3 counseling department goals, aligned with school & district goals				
Identified student standards, competencies and indicators taught by grade level				
At least 4 days of time/task analysis done twice a year for each counselor				

Counselor/administrator		
agreement done and discussed		
for each counselor		
Counseling advisory committee		
meets at least twice a year		
Counseling department year long		
calendar developed and posted		
centrally		
Counseling department monthly		
calendar developed		
Weekly calendar posted for each		
counselor		
At least one curriculum action		
plan for each counselor that		
aligns with department goal(s)		
developed each year (different		
than previous action plans)		
At least one closing the gap		
action plan for each counselor		
that aligns with department		
goal(s) developed each year		
(different than previous action		
plans)		
Pre-post test done on at least one		
guidance curriculum lesson by		
each counselor		
Standards & competency related		
data compiled and analyzed		
(pre/post test data) by each		
counselor		
Curriculum results report for		
each action plan for each		
counselor, including process,		
perception and results data		
Curriculum results report for		
each closing the gap action plan		
for each counselor, including		
process, perception and results		
data		
Results over time report that		
aligns with department goal(s)		
developed and analyzed by the		
department, including		
immediate, intermediate and		
longitudinal data		

Counseling department goal data disaggregated and analyzed by department		
Yearly counseling program audit completed by department		
School counselor performance evaluation used for each counselor by administrators (not teacher evaluation)		
Counseling program presented by counseling department to faculty/staff at least once each year.		
Counseling program presented by counseling department to parents at least once each year.		
Counseling program presented by counseling department to school board at least once each year.		

# What are three things that you are most proud of as a department?

These can be 3 of the elements above, or can include something different. Please share evidence/documentation of this accomplishment, so others can learn from your excellence!

<b>Department Accomplishments we are most Proud of!</b> What department/school/district goal does this support? Please write up description of activity, or action plan, so that this can be shared with others!	Elements implemented systematically (evidence/ documentation? )
1.	
2.	
3.	

## What are three things that you need to STOP or START doing as a department?

What do you do that does NOT support attainment of counseling goals & best practices? What do you need to START doing?	Is it a Fair Share activity? Who else has been asked to do this?	How much time do you currently spend on this activity? How do you know?	Who are all the people whose support you need to STOP doing this, or to START doing this?
1.			
2.			

3.	