Anita Young *is an assistant professor at The Johns Hopkins University, Rockville, MD. E-mail: aayoung@jhu.edu* **Carol Kaffenberger** *is associate professor emerita at George Mason University, Fairfax, VA.*

The Beliefs and Practices of School Counselors Who Use Data to Implement Comprehensive School Counseling Programs

School counselors are required to implement accountability strategies in order to increase student performance and contribute to closing the achievement gap. This study investigates the beliefs and practices of school counselors who have earned national recognition for implementing comprehensive school counseling programs based on identifying program goals and using data to close the achievement gap. The study asked Recognized ASCA Model Program (RAMP) school counselors how they use data to inform program decisions and their beliefs about using data. The results suggest that school counselors who have earned RAMP understand the importance of using data to provide services to students and drive program evaluation and improvement. Participation in the RAMP process appears to have a positive impact on data practices and school counselors' beliefs about the importance of using data.

The call to use data is not only clearly defined in school reform, it is the foundation of transformative school counseling. Studies indicate that implementing school counseling accountability strategies as a result of collecting and analyzing data can lead to increased student performance, contribute to closing the achievement gap, and demonstrate program effectiveness (House & Hayes, 2002; Isaacs, 2003; Johnson, 2002; Rowell, 2006; Sink & Stroh, 2003; Ward, 2009; Ware & Galassi, 2006). Yet, school counselors often do not systemically use data to advance student success. The authors conducted this study to determine how school counselor recipients of the Recognized ASCA Model Program (RAMP) utilize data to inform decisions and to understand their motivational beliefs.

Policymakers and counseling leaders acknowledge the power of data to inform instructional outcomes and to channel school counselors' roles in school reform (e.g., American School Counselor Association [ASCA], 2008; Council for the Accreditation of Counseling and Related Educational Programs [CACREP], 2009; Dimmit, 2009; Education Trust, 1997; Erford, 2009; Holcomb-McCoy, 2007; Isaacs, 2003). The No Child Left Behind Act (NCLB) of 2001 requires each state to implement a statewide accountability system addressing the academic needs of all students. Thus, usage is key to the improvement of educational outcomes. Many central office administrators use data to inform decisions that improve instruction, demonstrate progress toward meeting state standards, justify program funding and personnel, and determine professional development needs (Whiston, 1996). Most recently, A Blueprint for Reform: The Reauthorization of Elementary and Secondary Education Act (U.S. Department of Education, 2010) identifies targeted education reform efforts and builds on previous reforms such as NCLB and the American Recovery and Reinvestment Act of 2009. Principals, teachers, and ancillary educators are expected to collect, aggregate, and disaggregate data to understand the context of closing the achievement gap.

ASCA (2005) defines the use of data as an "accountable method to align the school counseling program with the school's academic mission" (p.16). Various accountability strategies have been encouraged from the early years of the guidance and counseling movement. Accountability is often seen as a catalyst to enhance school counselor credibility and a means to establish desirable outcomes for school counseling programs (Gysbers, 2010; Gysbers & Moore, 1974; Sink, 2009; Whiston, 1996). For instance, Gysbers (2010) detailed the evolution and consistent need for school counseling accountability strategies from the 1920s to the present, describing briefly various evaluative interventions that impact school counseling programs and student outcomes. Researchers have postulated, and in some cases demonstrated, that students enrolled in schools with fully implemented and well-established comprehensive school counseling programs have increased academic achievement on criterion and norm reference assessments, sustained positive

teacher relationships, and overall positive student success (Erford, 2009; Lapan, Gysbers, & Kayson, 2006; Lapan, Gysbers, & Petroski, 2001; Nelson, Gardner, & Fox, 1998; Sink, Akos, Turnbull, & Mvududu, 2008; Sink & Stroh, 2003; Whiston & Quinby, 2009). Counselor educators, professional associations, and policy organizations have also issued an urgent call for school counselors to use data to evaluate the impact of school counseling programs on student academic success, among other outcomes (e.g., ASCA, 2005; Dahir & Stone, 2003; Dimmit, 2009; Education Trust, 1999; Gysbers, 2010; House & Hayes, 2002; Young & Kaffenberger 2009).

ASCA (2005) has assumed a leadership role in advocating for the use of data as central to the implementation of a comprehensive school counseling program. To that end, ASCA recognizes exemplary school counseling programs that embrace the ASCA National Model and successfully answer the question, "How are students different as a result of what school counselors do?" (ASCA, 2005, p. 59). Collection, analysis, integration, and dissemination of data are guiding practices for a Recognized ASCA Model Program (RAMP).

RAMP award recognition is granted to individual K-12 schools, not districts or school counselors, and is intended to demonstrate how the school counseling program aligns with the ASCA National Model. RAMP helps school counselors evaluate their program and identify areas for improvement, and it ultimately enhances the school counseling program's efforts to contribute to student success. The application involves submitting 12 components that include a statement of philosophy, a mission statement, three school counseling program goals, competencies and indicators, management agreements for each counselor, advisory council, calendars, classroom guidance curriculum action plans and lessons, classroom guidance curriculum results reports, small group counseling responsive services, closing-the-gap results report, and a program reflection. In addition to these documents, each of the first 11 components requires a narrative that provides the rationale for the information submitted. The use of data is central to the RAMP process. School counselors are required to review their data to identify three program goals that align with the school counseling mission statement and target specific gap issues (e.g., behavior, attendance, achievement). RAMP applicants also must identify interventions to evaluate the impact of classroom guidance curriculum lesson plans, small group interventions, and closing-the-gap interventions, and report results that include process, perception, and outcome data.

Despite this ongoing call for accountability, anecdotal evidence suggests that school counselors remain slow to respond (Johnson, Rochkind, & Ott, 2010). Isaacs (2003) speculated that resistance to change and not systematically confronting educational barriers can prevent school counselors from making data-driven decisions about improving student performance. Avoidance of change and lack of general self-efficacy and school counselor self-efficacy can also limit data-driven decision making (Holcomb-McCoy, Gonzales, & Johnson, 2009). Holcomb-McCoy et al. examined school counselor dispositions and found that willingness to use data to improve school counseling interventions was more closely related to school counselor self-efficacy than openness to change or commitment to the school counseling profession. Furthermore, Bodenhorn, Wolfe, and Airen (2010) examined the relationship between school counselor self-efficacy and perception of existing achievement gaps and found that participants with higher school counselor self-efficacy were more likely to identify achievement gaps in their buildings and to use the ASCA Model as a framework for their school counseling programs. These two studies indicate that when school counselors feel more confident in their abilities, they are more likely to use data to address achievement gap issues.

The pressing issue is, therefore, how to help school counselors increase their use of accountability strategies. Most school counselors acknowledge the importance of using data, but lack clarity about how to analyze data and implement accountability strategies (Whiston & Quinby, 2009). Professional development efforts sponsored by district and school counseling associations have been somewhat effective in assisting school counselors understand the importance of using data, but have not necessarily increased their actual use of data (Holcomb-McCoy et al., 2009).

What is unclear is how to help school counselors repeatedly use data to develop and improve their school counseling programs. Given this state of affairs, the authors conducted this study in order to understand the beliefs and practices of a particular group of school counselors who are consistently using data. To determine how school counselors are using data, their attitudes about data, and what motivates them to use data, the authors investigated how developing data-driven comprehensive school counseling programs influences school counselors who are Recognized ASCA Model Program (RAMP) recipients.

Research Questions
This investigation was intended to inform school counseling professionals about beliefs and practices of school counselors who have been recognized for their consistent use of data to develop a comprehen-

> Principals, teachers, and ancillary educators are expected to collect, aggregate, and disaggregate data to understand the context of closing the achievement gap.

sive school counseling program. The authors examined six research questions: (a) How do RAMP school counselors use data? (b) What motivates RAMP school counselors to collect and analyze data? (c) What type of data practices do RAMP school counselors use to collect and analyze data? (d) How are RAMP school counselors trained to use data? (e) How do RAMP school counselors share data? and (f) What do RAMP school counselors believe about the importance of using data?

METHOD

This descriptive study examined RAMP school counselors' beliefs about using data and their data practices. Participants in the study completed a 20-item questionnaire online.

Participants and Procedures

The authors used a purposive sample to identify school counseling participants for this study. RAMP school counselors were asked to participate because of their validated use of data and ability to provide equitable services to all students as evident through national recognition. The authors obtained a list containing RAMP program recipients that was approved by the American School Counselor Association. At the time of this study (2010), 231 school counseling programs had earned this recognition. The identified point of contact from each of the 231 RAMP school programs was invited to participate in the research. An electronic survey was sent twice to the RAMP school counseling point of contact within a two-month timeframe. The first attempt yielded 78 responses. The second attempt yielded an additional 36 responses for 114 (48%) school counselor responses. Forty-two participants (36.8%) were elementary school counselors, 23 (20.2%) were middle school counselors, and 49 (43%) were high school counselors. The mean years of school counseling experience for participants was 4.86 (SD = 1.86). School counselors' average student population and counselor-to-student ratio varied by school level, ranging from 318 to 522 students (see Table 1). Gender and ethnicity data were not collected.

Instrumentation

To answer the research questions, the investigators developed a survey based on a review of the literature and adapted questions from an instrument piloted with approximately 250 school counselors during data training workshops over a three-year timeframe. The school counselor assessment, Data Beliefs and Practices Survey (DBAPS), consists of 20 items. The subscale of questions assessing counselors' perceptions of data practices and uses consist-

Table 1. Average Student Population and Counselor-to-Student Ratio, by School Level

	n	*M*	*SD*
Student Population			
Elementary School Counselors	42	675	273.39
Middle School Counselors	23	846	301.51
High School Counselors	49	1,922	676.57
Counselor-to-Student Ratio			
Elementary School Counselors	42	522	222.59
Middle School Counselors	22	339	151.46
High School Counselors	49	318	105.05

ed of 13 items (α = .93) using a 7-point Likert scale with the anchors ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Participants were requested to answer statements as a result of participating in the RAMP process. For example, some of the items that assessed school counselors' data practices included, "I use data to identify barriers that impede student performance," "I regularly review my school's data (academic, attendance, behavior) to identify gaps," and "I use data to prepare students for college readiness." For a complete list of survey items that look at data practices, see Table 2. Items such as, "I use quantitative data collection methods to improve my school counseling services/programs" and "I use qualitative data collection methods to improve my school counseling services/programs" assess the type of data collection methods school counselors used. Items 14-18 required participants to check all that apply and measured school counselors' data training and data sharing practices. Two open-ended questions assessed school counselors' motivation to use data and their understanding of the purposes for using data. Those questions were (a) "What motivates you to use data?" and (b) "What are the three most important reasons you use data?" The purpose of the questions was to understand the school counselors' personal motivation and to understand their perceptions of the reasons they use data.

RESULTS

Descriptive statistics suggest that RAMP school counselors demonstrate a high level of ability in collecting and using data to inform practices (see Table 2). This section presents specific results according to each research question. Omitted items do not influence the descriptive statistical outcome of sample responses.

RAMP helps school counselors evaluate their program and identify areas for improvement, and it ultimately enhances the school counseling program's efforts to contribute to student success.

Table 2. Means and Standard Deviations of Counselors' Data Practices

Question	n	M	SD
I have increased my use of data to demonstrate the effectiveness of my school counseling program.	113	6.47	1.02
I have maintained my momentum to use data.	113	6.24	1.00
I use data to identify barriers that impede student performance.	113	6.27	.98
I regularly review my school's data (academic, attendance, behavior) to identify gaps.	113	6.32	1.12
I use data to inform and facilitate the school counseling services and programs that I lead.	113	6.44	.96
I use quantitative data collection methods to improve my school counseling services/programs.	112	6.27	1.14
I use qualitative data collection methods to improve my school counseling services/programs.	112	6.27	1.02
I analyze the data I collect.	112	6.50	.91
Our school counseling department uses data to set strategic goals.	109	6.34	1.03
I use data to identify and close achievement gaps in my building.	112	6.25	1.11
I use data to evaluate student enrollment patterns.	111	4.91	1.56
I regularly conduct pre-tests when facilitating classroom guidance lessons, workshops, and small group counseling interventions.	112	6.15	1.13
I use data to prepare students for college readiness.	112	5.29	1.66

Note. Survey results indicated on a Likert scale of 1 to 7 where 1 indicates *"Strongly Disagree"* and 7 indicates *"Strongly Agree."*

Research Question 1

How do RAMP school counselors working in comprehensive school counseling programs use data? School counselors indicated using data for a variety of purposes (see Table 2). Nearly all school counselors (n = 113) agreed or strongly agreed that they have increased their use of data as a result of the RAMP process, and reported that they use data to inform school counseling services and programs they lead (90% and 90%, respectively). Similarly, most school counselors agreed or strongly agreed that they use data to identify barriers that impede student performance, or reported that, in order to identify gaps in specific indicators of school success, they regularly review their school's report card, which provides an assessment of student academic performance, attendance, and behavior (80% and 85%, respectively.)

The researchers performed an analysis of variance (ANOVA) on all 13 questions related to school counselors' perceptions of data practices and uses to determine if there were any significant differences by school level. Assumptions of independence, normality, and homogeneity of variance were met for an omnibus F test. The authors used a Boneferronni adjustment to account for the error that was introduced by computing multiple ANOVAs. Therefore, results were only considered statistically significant if they produced a p value less than .001. The omnibus F tests indicated that two questions generated statistically significant results. Tukey post hoc tests were used to identify specific school-level differences on the dependent variables.

The ANOVA F-test results indicate that statistically significant differences existed among counselors' use of data to prepare students for college readiness by school level, $F(3, 108) = 21.28$, $p < .001$, $p\eta^2 = .37$. Results from the post hoc test (see Table 4) indicate that elementary school counselors were significantly less likely to indicate the use of data to prepare students for college readiness than were middle school counselors ($p = .001$) and high school counselors ($p < .001$).

The ANOVA F-test results also indicate statistically significant differences among counselors' use of data to evaluate school enrollment patterns by school level, $F(3,107) = 3.18$, $p = 3.18$, $p = .03$, $p\eta^2 = .08$. After accounting for the Bonferroni adjustment, however, these results are not considered statistically significant. Results from the Tukey post hoc comparison indicate that high school counselors were significantly more likely to indicate that they use data to evaluate school enrollment patterns than were elementary school counselors ($p = .03$).

Research Question 2

The second research question, "What motivates RAMP school counselors to collect and analyze data?" was explored using one open-ended item ("What motivates you to use data?"). One hundred

When school counselors feel more confident in their abilities, they are more likely to use data to address achievement gap issues.

Table 3. Percent of School Counselors who "Agree" or "Strongly Agree" with the following statements

Question	n	Percent
I have increased my use of data to demonstrate the effectiveness of my school counseling program.	113	90.3%
I have maintained my momentum to use data.	113	83.4%
I use data to identify barriers that impede student performance.	113	88.6%
I regularly review my school's data (academic, attendance, behavior) to identify gaps.	113	85.1%
I use data to inform and facilitate the school counseling services and programs that I lead.	113	90.3%
I use quantitative data collection methods to improve my school counseling services/programs.	112	84.2%
I use qualitative data collection methods to improve my school counseling services/programs.	112	86.8%
I analyze the data I collect.	112	92.1%
Our school counseling department uses data to set strategic goals.	109	82.5%
I use data to identify and close achievement gaps in my building.	112	84.2%
I use data to evaluate student enrollment patterns.	111	42.1%
I regularly conduct pre-tests when facilitating classroom guidance lessons, workshops, and small group counseling interventions.	112	78.0%
I use data to prepare students for college readiness.	112	51.8%

Note. Survey results indicated on a Likert scale of 1 to 7 where 1 indicates *"Strongly Disagree"* and 7 indicates *"Strongly Agree."*

and five of the 113 participants provided 180 qualitative responses that the researchers coded through the identification of emerging themes and categories. The second author conducted the primary coding analysis. The first author and a research assistant conducted investigator triangulation to ensure accuracy of the coding process and to prevent researcher bias (Denzin & Lincoln, 1995; Richardson, 2000). To refine the coding process, the authors used classical content analysis techniques. They carefully reviewed qualitative data from the open-ended responses and categorized them into matrix units. The next step involved coding each unit into themes or related variables that could be analyzed for descriptive statistical purposes (Roberts, 1997; Strauss, 1987). For this study, the researchers calculated the percentage of agreement for each theme and identified core categories that account for significant theme variation and similarities. The four primary themes that emerged were: student needs, program evaluation, advocacy for the profession, and accountability expectations. Results are reported descriptively and verbatim to give voice to participants' perceptions and practices (Denzin & Lincoln, 2000; Morrow, 2005; Patton, 2002).

Student needs. Fifty-six of the 180 school counselor responses (31%) indicated that using data helped them meet the needs of students. Using data allowed them to make informed decisions about strategies and interventions to help students

(n = 28), assured that all students were academically successful (n = 22), and allowed them to assure equity and access (n = 6).

Program evaluation. The theme of program evaluation or improvement emerged among 44 of the 180 school counselor responses (24%). Specifically, school counselors reported using data to help them conduct program evaluation and make improvements (n = 35) and make data-driven decisions (n = 8). One counselor mentioned the ability to link school counselor results data to college readiness.

Advocating for the profession. In 48 of the 180 school counselor responses (27%), what motivates use of data is that the information allows them to advocate for the school counselor position, gain credibility, and demonstrate that school counselors make a difference (n = 43) and to share results data with stakeholders (n = 5).

Accountability expectations. Thirty-two of the 180 school counselor responses identified external (n = 22) and internal motivators (n = 10). Seven school counselors reported that they were motivated to use data because the RAMP process required them to do so. Five said they were required to do so by school and/or district administrators, and 10 indicated that they were required to share data with stakeholders. Ten school counselors indicated that their motivation to use data was driven by personal interest or participation in previous in-services that

What is it about the RAMP process that seems to encourage the use of data and reinforce school counselors' beliefs about the importance of using data?

Table 4. Multiple Comparisons for Data Practices Among School Level Groups

School Level	ΔM	$SE\Delta M$	95% CI for ΔM	
			Lower	Upper
I use data to prepare students for college readiness.				
Elementary — Middle	-1.40*	.36	-2.34	-.47
Elementary — High	-2.23*	.28	-2.96	-1.49
High — Middle	.82	.29	-.09	1.73

Note. * p < .001.
ΔM = Difference between means.
$SE\Delta M$ = Standard error of difference between means.
95% CI for ΔM = 95% Confidence interval of the difference.

helped them to see the helpfulness of data collection and analysis.

Research Question 3

What types of methods are used by RAMP school counselors to collect and analyze data? The question was answered by two Likert-scale statements: "I use quantitative data collection methods to improve my school counseling services/programs," and "I use qualitative data collection methods to improve my school counseling services/programs." Descriptive data from the DBAPS indicated that RAMP school counselors used both quantitative and qualitative collection methods (see Table 3). Eighty-four percent of respondents (n = 112) agreed or strongly agreed that they use quantitative data collection methods to improve their school counseling services and programs (M = 6.27). Eighty-seven percent of respondents (n = 112) agreed or strongly agreed that they use qualitative data collection methods to improve school counseling services and programs in their buildings (M = 6.27, SD = 6.14). Eighty-two percent of respondents (n = 112) agreed or strongly agreed that they analyze the data they collect. Seventy-eight percent of respondents (n = 112) indicated they agreed or strongly agreed that they conduct pre-post evaluations when facilitating classroom guidance lessons, workshops, and small group interventions (M = 6.15, SD = 1.13).

Research Question 4

The fourth question was, "How are RAMP school counselors trained to use data?" School counselors responded to the "check all that apply" question in various ways. Seventy percent of respondents (n = 80) indicated that they were trained to use data during district professional development trainings. Fifty-four percent indicated they were trained to use

> **Participation in the RAMP process and observing the impact of targeted interventions that address gaps reinforced the importance of using data.**

data in graduate school (n = 62). Thirty-nine percent indicated they were trained to use data at state or national conferences (n = 45). Six percent (n = 7) indicated that they were not trained to use data.

Research Question 5

The fifth research question, "How do RAMP school counselors share the data?" asked respondents to "check all that apply" and was answered by all 114 respondents. Ninety-four percent (n = 108) share data with administrators, 88% (n = 101) with counseling colleagues, 79% with teachers (n = 91), and 60% with parents (n = 69). The lowest percentage (50%, n = 57) share data with the students they serve. School counselors were more likely to report data through a narrative report (81%, n = 92) rather than using tables (70%, n = 80) or charts (73%, n = 83). A small number (4%, n = 5) suggested that they do not report data results.

Research Question 6

To answer research question 6, "What do RAMP school counselors believe about the importance of using data?" school counselors were asked: "What are the three most important reasons you use data?" One hundred three respondents offered 329 reasons why using data is important. Using content analysis, coded responses fell into themes similar to those that emerged in response to question 2. The themes were: student needs, program evaluation, advocacy for the profession, and accountability expectations.

Student needs. Of the total number of reasons given for using data, 123 of the 329 comments (37%) related to meeting the needs of students. This theme spoke to the use of data to assess student needs in order to target interventions (n = 63), increase student achievement (n = 39), close the achievement gap (n = 19) and prepare students for college (n = 2). The school counselors also reported using data to "identify barriers to student success," or "to identify what works and doesn't work" and "to make informed decisions about what is best for kids."

Program evaluation. Of the total number of reasons given for using data, 131 responses (40%) were related to program evaluation and improvement. This theme fell into two categories: evaluating school counseling programs and interventions with the goals of program improvement (n = 90) and being data driven, working more efficiently as a result of using data (n = 41). One school counselor put it this way: data is used "to assess the school counseling program and drive our specific goals and programs according to the needs of the school."

Advocate for the profession. Fifty-six of the responses (17%) referred to the use of data to vali-

date and advocate for school counseling programs. This theme spoke to the use of data to validate school counseling services and to advocate for school counseling interventions and programs (*n* = 37) and the desire to share results with stakeholders to demonstrate how school counseling programs make a difference (*n* = 19).

Accountability expectation. Twenty of the responses (6%) were related to the expectation of others to collect data. Several school counselors said that data make school counselors "accountable." Only two counselors said that their reason was for using data was the RAMP application.

DISCUSSION

The findings of this study indicate that a substantial percentage (approximately 82.5%) of RAMP school counselors are using data to inform program decisions. Participants reported a clear understanding and consistent use of quantitative and qualitative data collection methods and continued to use data after seeing the power of data-driven decision making. Beyond this, 91% of RAMP school counselors say that they have increased their use of data and 84% indicate that, since attaining RAMP, they have maintained their momentum to use data. Survey responses also indicate that RAMP school counselors share results data with administrators, colleagues, teachers, and parents, although sharing data with parents and students was an outcome less likely to occur.

So what is it about the RAMP process that seems to encourage the use of data and reinforce school counselors' beliefs about the importance of using data? The majority of school counselors in this study reported that participation in the RAMP process and observing the impact of targeted interventions that address gaps reinforced the importance of using data. One school counselor said, "Honestly? Initially, it was the RAMP application; however, going through the process of completing the application has really transformed the way the entire department thinks about what we do. We are genuinely concerned about the effectiveness of our programs." Although a correlation between pursuing RAMP and increased belief in the importance of using data cannot be made, the findings of this study suggest that RAMP provided one vehicle for encouraging school counselors to use data and that, once school counselors saw the power of data, they were motivated to continue using data. As suggested in this study and others (Bodenhorn et al., 2010; Holcomb-McCoy et al., 2009), school counselors' self-efficacy—their confidence in their ability to use data to address student needs and evaluate their interventions—was reinforced when they saw the

power of data to make a difference for students and may have increased as a result of engaging in the RAMP process.

The two open-ended questions shed light on the school counselors' beliefs about data. Respondents were asked, "What motivates you to use data?" and "What are the three most important reasons you use data?" The purpose of the questions was to understand the school counselors' personal motivation and reasons for using data. Responses to the two questions fell into the same four themes, with a great deal of consistency among the percent of responses (Patton, 2002; Richardson, 2000). For instance, 41% of the responses to question 2 about motivation fell into the category concerning the needs of students and 37% of the responses to question 6 fell into the same category. The other four themes were also consistent with less than a 3% difference in the theme of program evaluation and less than a 1% difference between the last two theme percentages. This finding may mean that school counselors did not differentiate between motivation and reasons for collecting data. In any case, this finding underscores the fact that RAMP school counselors report that they use data primarily to help students and improve programs. The desire to advocate for their program or meet external expectations appears to be secondary.

Although the findings of this study suggest that RAMP school counselors believe in the power and use of data to drive comprehensive school programming, the results showed less of a tendency to use data to evaluate program enrollment patterns or to prepare students for college readiness. Previous research (McDonough, 2004; Schellenberg & Grothaus, 2009; Sherrod, Getch, & Ziomek-Diagle, 2009) showed that school counselors directly contribute to student success through the collaborative implementation of evidence-based interventions, advocating for rigorous course enrollment for all students, and leading initiatives that broaden students' college preparedness and readiness. The results further indicate that high school counselors are significantly more likely to use data to evaluate school enrollment patterns such as gifted, talented, and honors classes than elementary school counselors. However, this does not imply that student enrollment and placement decisions are always made with regard to equitable services at all levels (Gysbers, 2010).

Furthermore, elementary school counselors reported themselves to be less likely than middle and high school counselors to use data for college readiness. Given the assumption and correlation between enrollment in courses of rigor and college readiness, these findings are significant (McDonough, 2004). Student enrollment in courses of rigor and focused

School counselors' self-efficacy—their confidence in their ability to use data to address student needs and evaluate their interventions—was reinforced when they saw the power of data to make a difference for students

college readiness at the elementary level should be the norm (Hossler et al., 1999). At the elementary level, the alignment of academics with career awareness counseling is critical. Academic interventions coupled with career counseling can provide a platform for awareness and exposure to post-secondary education expectations. Even RAMP school counselors in this study were limited in their use of data to encourage and create a college-going culture.

An additional finding emerged from this study related to how school counselors report data. Specifically, RAMP school counselors are not communicating with parents or students, as compared to colleagues and administrators, about how they are using data to drive program decisions. Sharing why data are used as a catalyst to close achievement gaps and improve program services can lead to heightened parent and student awareness and, in the case of students, can result in enhanced self-regulated behaviors (Dimmit, 2009).

School counselors receive training related to data from a variety of sources, but which models are more effective is not clear (Gysbers & Henderson, 2005; Peace & Sprinthall, 1998). The RAMP counselors indicated that they received training in the use of data from a variety of sources. Associations and organizations (e.g., ASCA, 2005; Education Trust, 1999) suggest that training in isolation does not increase school counselor use of data. Multiple training methods and training from various sources such as district training, department of education, and national associations may increase school counselor use of data. In the case of the RAMP counselors, training plus the incentive to use data to attain RAMP may be an effective way to assure that school counselors are implementing data driven programs.

IMPLICATIONS FOR SCHOOL COUNSELING PROFESSIONALS

Future Research
Based on the findings, the authors offer suggestions for future research and implications for school counseling professionals. Researchers interested in replicating this study could expand the inquiry to address the relationship of data use and self-efficacy. Given the fact that the RAMP process has only existed for approximately five years, an important investigation would explore whether RAMP school counselors continue to use data over time. Longitudinal RAMP studies examining RAMP school counselor beliefs and use of data by elementary, middle, and high school levels could also contribute to the impact that comprehensive school counseling programs have on closing the achievement gap.

Additionally, the authors encourage school counselors to engage in action research practices. School

counselors who have completed the RAMP process tend to understand the importance of using data and may be motivated to continue using data to drive their programs. Perhaps the RAMP process itself, the process of developing a comprehensive school counseling program based on goals derived from the school data, may be the catalyst for the future use of data and the development of evidence based practices.

Professional School Counselors
The findings of this research may suggest that implementing a comprehensive school counseling program that is based on using data increases school counselors' beliefs and practices about the use of data. The authors provide four recommendations for professional school counselors. First, school counselors should be encouraged to implement comprehensive school counseling programs based on the identification of program goals. Goal setting that is based on the school data and aligned with the instructional mission statement increases data practices (ASCA, 2005).

Second, the use of data to examine enrollment patterns and ensure access to equitable services for all students should be the minimum expectation for school counselors at any level. School counselors must move from scheduling to coupling academic advisement with career counseling in order to correlate the significance of enrollment in rigorous courses with college preparedness (McDonough, 2004). Early awareness and exposure to post-secondary educational opportunities empowers students to seek information about courses of rigor (Hossler et al., 1999). To ensure that students are successful, school counselors at all levels should commit to continuously reviewing students' formative and summative academic progress and providing ongoing academic and career counseling.

Another increasingly critical reason for school counselors to use data is to close achievement gaps that exist for students of color and underrepresented populations. Some students from lower socioeconomic statuses have been socialized to believe that educational attainment is not within their destiny (Herring & Salazar, 2002). Closing the gap in opportunities for students to learn and gain academic access is an educational equity goal that begins with intensive and rigorous school curricula that meet the needs of all students (Brown & Trusty, 2005).

Fourth, school counselors should consider sharing the systemic impact of their data practices through the use of tables or charts within summary reports (Dahir & Stone, 2003; Young & Kaffenberger, 2009). Stakeholders such as administrators appreciate concise visuals when seeking to improve the instructional learning environment.

Elementary school counselors reported themselves to be less likely than middle and high school counselors to use data for college readiness.

Counselor Educators

Given the finding that school counselors have learned how to use data in a variety of settings, such as professional development and conferences, and that less than 50% were trained as a part of their graduate school program, the authors recommend that all school counselors receive systematic training in their preparation programs but also as part of their jobs as school counselors. Although the authors acknowledge the percentage of participants who received training in programs that did not emphasize the use of data, the authors suggest that school counseling graduate programs consider including courses that help students ground their philosophical beliefs about data practices and integrate data assignments throughout the curricula. Specifically, counselor educators may consider teaching the tenets of the Education Trust Transforming School Counseling Programs and the ASCA National Model Framework as outcome measures, and adhering to CACREP 2009 standards for introductory school counseling courses by requiring students to design data-driven school counseling program components (ASCA, 2005; Education Trust, 1997; Gysbers, 2004). Specifically, graduate programs should teach students how to collect, analyze, and share data outcome results to close achievement gaps (Dahir & Stone, 2003). For example, an assignment may include reviewing mock school report card data to identify achievement gaps or designing a comprehensive school counseling program that includes the use of pre- and posttests to measure the impact of interventions. The field experiences should include a data collection project (Murphy & Kaffenberger, 2009). Programs should also have a faculty commitment and clear program vision to teach graduate students throughout their program how to use data to identify inequitable services, prepare K-12 students for college, and evaluate school counseling program effectiveness. As a result, counselors-in-training will be able to transfer theoretical constructs into practice during field experiences (Rowell, 2006).

LIMITATIONS

Although the existence of school counselors who acknowledge the impact of data to effect change is a safe assumption, substantial caution should be taken when applying self-report data to all non-RAMP counselors. Definitive conclusions are also inappropriate given that participant responses were not compared to school counselors who are not engaged in data collection to implement comprehensive school counseling programs. Without gender and ethnicity data, external validity is further compromised. Experimental bias may have been decreased by using an electronic survey.

CONCLUSION

The findings of this study suggest that a large percentage of surveyed RAMP school counselors understand the importance of using data. The majority of respondents also reported the use of data to address educational issues after earning the award. A larger percentage appear to use data as a method to close achievement gaps, provide services to students and parents, and drive program evaluation. This study indicates that RAMP school counseling professionals believe that using data to transform and implement comprehensive school counseling programs benefits K-12 students. Ultimately, the use of data must become the expectation for making school counseling program decisions. Further research is needed to verify these trends. ∎

REFERENCES

American School Counselor Association. (2005). *The ASCA national model: A framework for school counseling programs* (2nd ed.). Alexandria, VA: Author.

American School Counselor Association. (2008). *School counselor competencies*. Retrieved from http://www.schoolcounselor.org/files/SCCompetencies.pdf

Bodenhorn, N., Wolfe, E., & Airen, O. (2010). School counselor program choice and self-efficacy: Relationship to achievement gap and equity. P*rofessional School Counseling, 13*, 165-174. doi 10.5330/PSC.n.2010-13.165

Brown D., & Trusty J. (2005). *Designing and leading comprehensive school counseling programs: Promoting student competence and meeting student needs.* Belmont, CA: Brooks/Cole.

Council for Accreditation of Counseling and Related Educational Programs. (2009). *2009 Standards*. Retrieved from http://www.cacrep.org/doc/2009%20Standards%20with%20cover.pdf

Dahir, C. A., & Stone, C. B. (2003). Accountability: A M.E.A.S.U.R.E. of the impact school counselors have on student achievement. *Professional School Counseling, 6*, 214-221.

Denzin, N. K., & Lincoln, Y. S. (1995). Transforming qualitative research method: It is a revolution? *Journal of Contemporary Ethnography, 23*, 349-358.

Denzin, N. K., & Lincoln Y. S. (2000). The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 769-793). Thousand Oaks, CA: Sage.

Dimmit, C. (2009). Why evaluation matters: Determining effective school counseling practices. *Professional School Counseling, 12*, 395-399. doi:10.5330/PSC.n.2010-12.395

Education Trust. (1997). *The national guidance and counseling reform program*. Washington, DC: Author.

Erford, B. T. (Ed.). (2009). *Transforming the school counseling profession* (3rd ed.). Upper Saddle River, NJ: Merrill Prentice-Hall.

Gysbers, N. C. (2004). Comprehensive guidance and counseling programs: The evolution of accountability. *Professional School Counseling, 8*, 1-14.

Gysbers, N. C. (2010). *School counseling principles: Remembering the past, shaping the future: A history of school counseling*. Alexandria, VA: American School Counselor Association.

Implementing a comprehensive school counseling program that is based on using data increases school counselors' beliefs and practices about the use of data.

Gysbers, N. C., & Moore, E. J. (1974). *Career guidance, counseling and placement: Elements of an illustrative program guide.* Columbia, MO: Career Guidance, Counseling and Placement Project, University of Missouri-Columbia.

Gysbers, N. C., & Henderson, P. (2005). *Developing and managing your school guidance program* (4th ed.). Alexandria, VA: American Counseling Association.

Herring, R. D., & Salazar, C. (2002). Non-western helping modalities. In J. Trusty, E. J. Looly, & D. S. Sandhu (Eds.), *Multicultural counseling: Context, theory and practice, and competence* (pp. 283-318). New York, NY: NOVA Science Publishers, Inc.

Holcomb-McCoy, C. (2007). *School counselors to close the achievement gap: A social justice framework for success.* Thousand Oaks, CA: Corwin Press.

Holcomb-McCoy, C., Gonzalez, I., & Johnston, G. (2009). School counselor dispositions as predictors of data usage. *Professional School Counseling, 12*, 343-351. doi:10.5330/PSC.n.2010-12.343

Hossler, D., Schmidt, J., & Vesper, N. (1999). *Going to college; How social, economic, and educational factors influence the decisions students make.* Baltimore, MD: Johns Hopkins Press.

House, R. M., & Hayes, R. L. (2002). School counselors becoming key players in school reform. *Professional School Counseling, 5*, 249-256.

Isaacs, M. (2003). Data-driven decision-making: The engine of accountability. *Professional School Counseling, 6*, 288-295.

Johnson, R. S. (2002). *Using data to close the achievement gap: How to measure equity in our schools.* Thousand Oaks, CA: Corwin Press.

Johnson, J., Rochkind, J., & Ott, A. (2010). Why guidance counseling needs to change. *Educational Leadership, 67*, 74-79.

Lapan, R. T., Gysbers N. C., & Kayson, M. (2006). *How implementing all Missouri guidance programs improves academic achievement for all Missouri students.* Jefferson City, MO: Missouri Department of Elementary and Secondary Education.

Lapan, R. T., Gysbers, N. C., & Petroski, G. (2001). Helping 7th graders be safe and academically successful: A statewide study of the impact of comprehensive guidance programs. *Journal of Counseling & Development, 79*, 320-330.

McDonough, P. M. (2004). *Choosing colleges: How social class and schools structure opportunity*. Albany, NY: State University of New York Press.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling Psychology. *Journal of Counseling Psychology, 52*, 250-260.

Murphy, S., & Kaffenberger, C. (2009). Supervising school counseling interns. In B. T. Erford (Ed.), *Professional school counseling handbook: A handbook of theories, programs & practices* (2nd ed.) Austin, TX: PRO-ED, Inc.

Nelson, D. E., Gardner, J. L., & Fox, D. G. (1998). *An evaluation of the comprehensive guidance program in Utah public schools*. Salt Lake City: Utah State Office of Education.

No Child Left Behind Act of 2001. Retrieved from http://www.2ed.gov/policy/elsec/leg/Esea02/107-110.pdf

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Peace, S. D., & Sprinthall, N. A. (1998). Training school counselors to supervise beginning counselors: Theory, research, and practice. *Professional School Counseling, 1*, 2-8.

Richardson, L. (2000). The choreography of qualitative research design. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 367-399). Thousand Oaks, CA: Sage.

Roberts, C. W. (1997). A theoretical map for selecting among text analysis methods. In C. W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 275-283). Mahwah, NJ: Lawrence Erlbaum.

Rowell, L. (2006). Action research and school counseling: Closing the gap between research and practice. *Professional School Counseling, 9*, 376-384.

Schellenberg, R., & Grothaus, T. (2009) Promoting cultural responsiveness and closing the achievement gap with standards blending. *Professional School Counseling 12*, 440-457. doi:10.5330/PSC.n.2010-12.440

Sink, C. A. (2009). School counselors as accountability leaders: Another call to action. *Professional School Counseling, 13*, 68-74. doi:10.5330/PSC.n.2010-13.68

Sink, C. A., & Stroh, H. R. (2003). Raising achievement test scores of early elementary school students through comprehensive school counseling programs. *Professional School Counseling, 6*, 350-364.

Sink, C. A., Akos, P., Turnbull, R. J., & Mvududu, M. (2008). An investigation of comprehensive school counseling programs and academic achievement in Washington state middle schools. *Professional School Counseling, 12*, 43-53. doi:10.5330/PSC.n.2010-12.43

Sherrod, M. D., Getch, Y., & Ziomek-Daigle, J. (2009) The impact of positive behavior support to decrease discipline referrals with elementary students. *Professional School Counseling, 12*, 421-433. doi:10.5330/PSC.n.2010-12.421

Strauss, A. L. (1987). *Qualitative analysis for social scientists.* New York, NY: Cambridge University Press.

U.S. Department of Education. (2010). Office of Planning, Evaluation and Policy Development, *ESEA Blueprint for Reform*. Washington, DC: Author.

Ward, C. (2009). *An examination of the impact of the ASCA National Model on student achievement at Recognized ASCA Model Program (RAMP) elementary schools*. Dissertation. Texas A&M University – Corpus Christi. DAI-A 71/03.

Ware, W., & Galassi, J. (2006). Using correlational and prediction data to enhance student achievement in K-12 schools: A practical application for school counselors. *Professional School Counseling, 9*, 344-356.

Whiston, S. C. (1996). Accountability through action research: Research methods for practitioners. *Journal of Counseling & Development, 74*, 616-623.

Whiston, S. C., & Quinby, R. F. (2009), Review of school counseling outcome research. *Psychology in the Schools, 46*, 267-272.

Young, A., & Kaffenberger, C. (2009). *Making DATA Work* (2nd ed.). Alexandria, VA: American School Counselor Association.

> **Use of data to examine enrollment patterns and ensure access to equitable services for all students should be the minimum expectation for school counselors at any level.**