NO SCHOOL COUNSELOR LEFT BEHIND: COUNSELORS USE OF DATA AND THEIR PERCEIVED OBSTACLES AND FACILITATORS

A Dissertation in
Counselor Education
by
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Submitted in Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

August 2016
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ABSTRACT

Legislation such as No Child Left Behind (NCLB) of 2001 created a situation where schools use data to track and monitor student success. Counselors are now being held to those same expectations that teachers and administrators have been since the NCLB legislation. Through this descriptive study, the obstacles and facilitators were explored by asking school counselors their perceived impact on their use of data in their counseling program.

406 school counselors from the ASCA membership directory reported how much they use data in their programs, in what ways do they use those data, and what factors they believe impede and facilitate their use of data. Love’s 4 Conditions of Data-based Decision Making were also explored. The primary research question for this study was, how do school counselors involved in RAMP Data Teams, Non-RAMP Data Teams, and those not involved in data teams (No Data Teams) differ on factors surrounding their use of data?

The highest impeding obstacles reported were time, availability to data teams, and data use culture. The highest facilitative ratings reported were data skills, importance of data and access to data. The hypothesized results were partially confirmed. These results demonstrated that both RAMP and Non-RAMP Data Team Counselors were significantly higher than No Data Team Counselors on Love’s 4 Conditions of Data-based Decision Making and the Facilitator-Obstacle Index. This suggests that being part of a data team might be as important or more important than RAMP itself on counselors’ data usage. Only Non-RAMP Data Team Counselors were significantly higher on their frequency of data usage. Non-RAMP Data Team Counselors reported using data on a weekly basis compared to RAMP Data Team Counselors and No Data Team Counselors using data on a monthly basis. Participation on a data team
appears to have a positive influence on data usage. Implications for practice and recommendations for future research are presented.
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ACKNOWLEDGEMENTS

First, I would like to thank God who guided me through this long journey. His love and support help me to persevere.

I would like to thank my doctoral committee members. I appreciate your patience with me. I have grown so much as a person and writer. Dr. Richard Hazler, my advisor and chair, I appreciate your support and patience. I know that it wasn’t always easy. Your biggest advice that gave me my first big boost was “It isn’t going to write itself.” It helped me to just get started when I was afraid that I had no idea where to even begin. Dr. JoLynn Carney, it all started with you. Who would have thought that me presenting to your class would end up being my dissertation topic – especially on the topic of DATA!!! Thank you for always making me THINK that I could do this. Dr. Jerry Trusty, thank you for helping me to see myself as a counselor educator. I wish you much happiness and peace in your well-deserved retirement. Dr. Ed Yoder, you can’t imagine how much I appreciate your advice and support with the methodology and statistics. Thank you for explaining statistics in a way that I actually enjoyed AND understood it. Dr. Anita Young and Dr. Carol Kaffenger, thank you so much for your time and insight when I started this process.

Mom and Dad, thank you for always believing in me and for instilling in me the notion that I could do anything in the world if I worked hard enough. My husband, Joe, thank you for your support (especially with the page numbers.) I think you wanted me done with this even more than I did! To my awesome kids, Joey, Nick and Taylor. Thanks for always understanding when I was off working on my dissertation instead of sometimes cooking dinner. I appreciate you truly supporting me even if there was an occasional teasing that I would never finish ~at least I finished my doctorate before Joey! 😊
Chapter 1

Introduction

Legislation such as No Child Left Behind (NCLB, 2001) and Individuals with Disabilities Education Act (IDEA, 2004) is creating a situation where schools use data to track and monitor student success. Counselors are now being held to those same expectations that teachers and administrators have been since the NCLB legislation. The American School Counselor Association (ASCA) National Model states the use of data to effect change is important in order to ensure that every student benefits from the school counseling program especially with the budget cuts that impact education.

Six Basic Tenets of National Initiatives: NCLB, IDEA, AND The ASCA National Model

The national initiatives of NCLB, IDEA and the ASCA National Model guide and mandate educators and counselors to use data to drive their programming. The initiatives work in different contexts, but they all stress six basic tenets: Data usage, closing the achievement gap, accountability, school wide programs, scientifically based instruction, and coordinating services (Lapan, Gysbers, & Petroski, 2001; Ryan, T., Kafflenberger, & Gleason Carroll, 2011; Young & Kaffenberger, 2011).

Tenet One: Closing the Achievement Gap. This tenet emphasizes closing the achievement gap between high- and low-performing students especially among minority and disadvantaged peers. The ASCA National Model (2003, p. 18) discusses one of the benefits of a school counseling program is to “provide strategies for closing the achievement gap because some students need more.” School counselors are being asked to use data to document their effectiveness in closing the achievement gap so that no child is left behind (Holcomb-McCoy, et al., 2009; Poynton, 2009; Young & Kafflenberger, 2011).
Tenet Two: Data Usage. Data can be used to show if the achievement gap is being closed. “The model recommends the use of disaggregated data to drive program and activity development, thus enabling school counselors to intentionally design interventions to meet the needs of all students and to close the gap between specific groups of students and their peers.” (ASCA, 2005, p.10). NCLB (2001) also discusses the importance of data like high-quality assessments designed to ensure that students are achieving. Data are important in order to measure student progress. If you do not have data, then how can you know if there is growth? School counselors are now expected to use data like other educators.

Tenet Three: Accountability. NCLB (2001) states to close the achievement gap “There is also an increased focus on accountability, which includes sanctions for schools that are not able to adequately demonstrate accountability in the required areas.” (Carey & Dimmitt, 2006, p. 416). The ASCA National Model devotes an entire chapter on accountability systems. This chapter focuses on result reports, school counselor performance standards, and even has a program audit. ASCA considers these necessities (ASCA, 2012) for school counselors and administrators to be held accountable to demonstrate that their students are achieving.

Tenet Four and Five: Scientifically Based Instruction/School-wide Programs. Schools must provide students with an enriched educational program including the use of school-wide programs that are scientifically based. The U.S. Department of Education created the Institute of Education Sciences (IES). According to the IES, “educational practice needs to be grounded in scientifically based research, which is research that involves the application of rigorous, systematic, and objective procedures in order to obtain reliable and valid knowledge relevant to educational activities and programs.” (Carey & Dimmitt, 2012, p. 417). NCLB discusses the importance of scientifically based instruction so all students have effective,
challenging academic content. It is no longer acceptable for school counselors to implement programs/groups that they think will work. School counselors have the obligation (like others in education) to choose evidence-based programs that have shown success towards student achievement.

**Tenet Six: Coordinating Services.** NCLB and IDEA both discuss the importance of coordinating services with other educational services (Gruman et al., 2013). Teams must work together using data to ensure all students are achieving. The ASCA National Model (2005) also states school counselors must work collaboratively with a team (the student, parents, teachers, school psychologists, and other support services) to ensure that students’ needs are being met. Poynton and Carey (2006) state “a collaborative school culture is necessary to facilitate productive data-based conversations among school personnel that are focused on improving student learning and development” (p. 124). No longer should school counselors work in isolation. Counselors must work collaboratively with teams in their building. When schools function within the realms of these six guiding principles found in NCLB, IDEA and the ASCA National Model, students achieve emotionally and socially.

**Importance of NCLB, IDEA and the ASCA National Model**

National initiatives such as NCLB, IDEA and the ASCA National Model have shown to increase student performance and success (Dee & Jacobs, 2010; Gruman et al., 2013; Lapan, Gysbers, & Petroski, 2001; Lapan, Gysbers, & Sun, 1997; Porter-Magee, 2004; Sink et al., 2008; Sink & Stroh, 2003). A variety of positive effects have been reported such as a decrease in discipline problems, an increase in student attendance, increased student achievement on standardized state achievement test scores, higher graduation rates, higher ACT average scores, and a higher number of students taking the ACT (Gardner, Nelson, & Fox 1999; Lapan, Gysbers,
& Petroski, 2001; Lapan, Gysbers, & Sun, 1997; Nelson et al., 2007; Sink et al., 2008; Sink & Stroh, 2003). School counselors are now being held to the same higher expectations that other educators have been.

**RAMP, 2003.** Recognized ASCA Model Program (RAMP) was created as a result of these national initiatives. RAMP is granted to individual schools that demonstrate delivering a comprehensive, (1) data-driven school counseling program that (2) collaborate with teams to meet the criterions established in the ASCA National Model (ASCA, 2005). It measures how closely their counseling program aligns with the National Model. The use of data is central to the RAMP process (ASCA, 2005, Wilkerson, et al., 2013; Young & Kaffenberg, 2011). School counselors are required to use data to determine if their interventions are meeting the needs of their students. School counselors are also expected to work with others in exploring that data and then share the results of that data with team members (including parents and students). Despite several national initiatives (NCLB, RtII, ASCA National Model and RAMP), the literature suggest that school counselors are still slow to respond to the importance of data-driven decision making in their counseling programs.

**School-wide Programs.** There have been a number of successful school-wide programs that have evolved out of the model for school improvement and student success. Positive Behavior Intervention and Supports (PBIS) ([http://www.pbis.org/school/what_is_swpbs.aspx](http://www.pbis.org/school/what_is_swpbs.aspx)) and the Olweus Bully Prevention Program (OBPP) ([http://www.clemson.edu/olweus/](http://www.clemson.edu/olweus/)) are two of these programs that have gained extensive support. It is clear that the use of data driven decisions and collaborative efforts have created a major part of their wide acceptance (Horner, et al., 2005; Lewis-Palmer, et al., 2002; Luiselli, et al., 2002).

**Importance of Counselors Using Data**
The evolution of school counseling to data driven models began in the 1970s when comprehensive school guidance programs were beginning to be introduced (Jones, et al., 1972; McDaniel, 1970) to systematically examine what and how school counselors provide services. Gysbers and Moore (1974; 1981) created manuals to encourage school counselors to provide comprehensive counseling programs to meet the needs of all students. The more recent national initiatives provided further guidance by stressing the importance of using data in education (Blacher et al., 2005; Isaacs, 2003; Johnson & Johnson, 2002; Rowell, 2006). “The call to use data is not only clearly defined in school reform, it is the foundation of transformative school counseling.” (Young & Kaffenberger, 2011, p.67). Research supports this trend emphasizing how counselors that collect and analyze data assist in increasing student performance and closing the achievement gap (Isaacs, 2003, Johnson & Johnson, 2002; Rowell, 2006; Young & Kaffenberger, 2011). The initiative, program development models, and the research make a strong case for school counselors to be using data, but other research suggests counselors do not appear to be using data to drive their counseling programs (Blacher et al., 2005; Holcomb-McCoy, et al., 2009; Poynton, 2009; Young & Kaffenberger, 2011).

**Counselors Low Use of Data**

All the support for using data for counseling services has not translated into extensive use and the research reports that counselors still have a low use of data (Blacher et al., 2005; Holcomb-McCoy et al., 2009; Isaacs, 2003; Poynton, 2009; Young & Kaffenberger, 2011). A 2012 study found only about 400 schools with counseling programs (.004%) have achieved RAMP status (U.S. Dept. of Education, 2012). “While schools collect a wide array of data (e.g., demographic data, performance data, program data), it has been reported that data are rarely used effectively to promote increased student achievement” (Holcomb-McCoy et al., 2009, p. 343).
Isaacs (2003) stated that resistance to change and not confronting educational barriers can prevent school counselors from using data that could help to improve student performance.

Counselors do use some data, but it tends to be more enumerative rather than impact data. The emphasis of data-driven school counseling programs requires school counselors to use more than the traditional enumerative data that has happened in the past (Dahir & Stone, 2003). “School counselors are now being asked to document and use data to illustrate their effectiveness in the context of academic achievement, attendance, and other student outcomes (e.g., retention rates, gradation rates)” (Holcomb-McCoy, et al., 2009, p. 343). It is clear that counselors’ use of data is low (Blacher et al., 2005; Holcomb-McCoy, 2009; Young & Kaffenberger, 2011). What are less clear is what obstacles stand in the way of school counselors from using data in their counseling programs and what facilitators support their increased use of data.

**What Kind of Data Do Counselors Use**

Counselors tend to use more enumerative data and non-standardized assessment techniques. The emphasis of data-driven school counseling programs requires school counselors to use more than the traditional enumerative data that has happened in the past (Dahir & Stone, 2003). It is no longer acceptable to just count what we do. We need to make sure that what we do counts. “School counselors are now being asked to document and use data to illustrate their effectiveness in the context of academic achievement, attendance, and other student outcomes (e.g., retention rates, gradation rates)” (Holcomb-McCoy, et al., 2009, p. 343). The effective use of data by school counselors is identified as a central tenet in school restructuring and improvement (Earl & Katz, 2002).

Blacher et al. (2005) surveyed counselors in California about their student assessment practices and their perception of the adequacy of their training. They found that school
counselors used non-standardized assessment techniques (observations and student interviews) most frequently. Blacher et al. (2005) further state “there is less evidence that school counselors actually are using those skills and that the training they receive is sufficient” (p.338). Data needs to be collected to determine what the counselors’ actual usage of data are before interventions are put into place to assist counselors in using data more often and in better ways. If interventions are put into place without data such as; professional developments and trainings in preparation programs, it is simply guess work. School counselors (like educators) are being asked to use data to drive interventions for their students to be successful. Counselor educators/administrators need to use data to determine what interventions can be put into place to assist counselors to be more successful. It is clear counselors’ use of data are low (Blacher et al., 2005; Holcomb-McCoy, 2009; Young & Kaffenberger, 2011). What is not clear is what the obstacles are that prevent school counselors from using data in their counseling programs.

**Obstacles**

Even with the literature discussing the importance of counselors using data, many counselors still are not using data (Blacher et al., 2005; Holcomb-McCoy, et al., 2009 and Young & Kaffenberger, 2011). There is information to suggest that a number of obstacles may reduce the amount of data and time spent analyzing data by school counselors (see Figure 1.1)
<table>
<thead>
<tr>
<th>Obstacles</th>
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<tbody>
<tr>
<td>1. ANM lacks practical procedures &amp; techniques</td>
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<tr>
<td>2. Access to useful data</td>
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<tr>
<td>3. Data part of school culture/Collaborative Culture</td>
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<tr>
<td>4. Lack of counselor accountability</td>
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<tr>
<td>5. Counselor not usually part of school improvement team</td>
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<tr>
<td>6. Data skills/Wide-spread Data Literacy</td>
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<tr>
<td>7. Lack of training</td>
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<tr>
<td>8. Disposition</td>
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<tr>
<td>9. Not even aware of importance/lack of value</td>
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<tr>
<td>10. Fear of reprisal</td>
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<tr>
<td>11. Case load</td>
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<tr>
<td>12. Amount of paperwork</td>
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<td>13. Years of experience</td>
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<td>14. Assignment of non-counselor duties</td>
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<td>15. Self-efficacy</td>
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<tr>
<td>16. Lack of time</td>
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<tr>
<td>17. Not their role</td>
</tr>
<tr>
<td>18. Lack of scheduled meetings to look at data/Collaborative Structures</td>
</tr>
<tr>
<td>19. Use of technology</td>
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<tr>
<td>20. Fear of failure</td>
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<tr>
<td>21. No data focus</td>
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<tr>
<td>22. Support</td>
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</tbody>
</table>

*Figure 1.1 Obstacles to Counselors’ Use of Data*
Figure 1.1 displays the obstacles found in the literature to counselors’ use of data (Bauman, 2004; Blacher et al., 2005; Bodenhorn & Airen, 2010; Holcomb-McCoy, et al., 2009; Lee & Workman, 1998; Poynton, 2009; Poynton & Carey, 2006; Whiston & Quinby, 2009; Young & Kaffenger, 2009; Young & Kaffenger, 2011). Blacher et al. (2005) stated “If school counselors are not utilizing assessment tools, plausible explanations might be that they feel inadequately trained, they do not have the time or opportunity, they believe that their role should not include assessment, or they are told by other educational professionals that school counselors should not be engaged in assessment activities” (p. 338). There does not appear to be a comprehensive study that has determined all of the possible obstacles and the severity of each obstacle. A focused study is necessary to document obstacles stating which are most important thereby allowing an action plan to be put into place to reduce the obstacles and hopefully increase the usage of data among school counselors (Gruman et al., 2013; Poynton, 2009; Young & Kaffenger, 2011).

**What Facilitates Data Usage**

Even if the obstacles are clearly defined, it is also important to understand the facilitators to data usage (see Figure 1.2).
Figure 1.2 Facilitators and Obstacles to Counselors’ Use of Data

Figure 1.2 displays the facilitators and obstacles found in the literature to counselors’ use of data (Bauman, 2004; Blacher et al., 2005; Holcomb-McCoy, et al., 2009; Poynton, 2009; Poynton & Carey, 2006; Whiston & Quinby, 2009; Young & Kaffenberger, 2009; Young & Kaffenberger, 2011). Many facilitators can also be obstacles (Poynton, 2009). Love (2004) states there are four conditions necessary for data-based decision making: collaborative culture, collaborative structures, widespread data-literacy, and access to useful data.Those same four enabling conditions could also promote the usage of data for counselors (see Figure 1.3).
<table>
<thead>
<tr>
<th>Collaborative Culture</th>
<th>Collaborative Structures</th>
<th>Wide-spread Data Literacy</th>
<th>Access to Useful Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data part of school culture</td>
<td>Lack of counselor accountability</td>
<td>Lack of skills/knowledge/Wide-spread Data Literacy</td>
<td>Access to useful data</td>
</tr>
<tr>
<td>Data team/ Collaborative Culture</td>
<td>Case load</td>
<td>Lack of training</td>
<td>Use of technology</td>
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<tr>
<td>Counselor disposition</td>
<td>Amount of paperwork</td>
<td>Counselor not even aware of importance/lack of value/Relevance</td>
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<td>Self-efficacy</td>
<td>Assignment of non-counselor duties</td>
<td>ANM lacks practical procedures &amp; techniques</td>
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<td>Fear of reprisal</td>
<td>Lack of time</td>
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<td>Fear of failure</td>
<td>Not counselor’s role</td>
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<tr>
<td>No data focus</td>
<td>Lack of scheduled meetings/Collaborative Structures</td>
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**LEGEND:**
- Facilitator
- Facilitator & Obstacle
- Obstacle

*Figure 1.3 Applying Facilitators and Obstacles to Love’s 4 Conditions for Data-based Decision Making (2002, 2004)*
Figure 1.3 displays the application of the obstacles and facilitators within Love’s 4 Conditions. If there is a collaborative culture (data teams) within the school, then it could be more likely that counselors will be engaging in the use of data. If there are collaborative structures (e.g., teams and scheduled meetings), that could also help to promote data usage for counselors. If there is widespread data literacy, then counselors could be more likely to have the skills needed to use data. If there is access to useful data, that could also promote data usage among counselors because it is less of an obstacle to obtain the data.

**Data Teams**

These data teams are one aspect that appears to reduce the obstacles and increase the usage of data among school counselors. There is information to suggest if counselors are involved in some form of team efforts around data, they are more likely to collect and use data (ASCA National Model, 2005; Dahir & Stone, 2003; Poynton & Carey, 2006). Young & Kaffenberger (2011, p. 73) found “a substantial percentage (approximately 82.5%) of RAMP school counselors are using data to inform program decisions.” This percentage among RAMP school counselors is extremely high compared the number of studies previously discussed.

Through the RAMP process, the use of data are central and counselors are expected to work on data teams with other members in their building. “Principals, teachers, and ancillary educators are expected to collect, aggregate, and disaggregate data to understand the context of closing the achievement gap.” (Young & Kaffenberger, 2011, p. 67). So it appears that counselors that have reached RAMP recognition are integral parts of the data teams in their buildings. The four enabling conditions discussed by Love (2004), collaborative culture; collaborative structures; widespread data-literacy; and access to useful data are all integral components in order to obtain RAMP recognition.
It is not entirely clear how many counselors are involved in data teams within their buildings. As previously discussed, counselors in RAMP recognized counseling programs work collaboratively and have a high percentage of data usage. “Ninety-one percent of RAMP counselors say that they have increased their use of data” (Young & Kaffenderger, 2011). All counselors do not seem to be as involved in data teams like the RAMP counselors. Blacher et al. (2005) found “school counselors were rarely involved in their school assessment program logistics despite their perception that they had received adequate training in these areas” (p. 340). The research (Blacher et al., 2005) found counselors rarely use data. That does not seem to be at the same high level (ninety-one percent) that RAMP counselors reported. The ASCA National Model (2003, p. 190) clearly states school counselors should “maximize collaborative teaming to ensure individual student success.” Therefore, it seems important that school counselors are part of the data teams in their school in order to promote counselors’ usage of data.

Many of the previous studies are small convenience samples (Blacher, Murray-Ward, & Uellendahl, 2005; Holcomb-McCoy, et al., 2009; Poynton, 2009). The current study is unique because it will gain the feedback from the larger sample of the ASCA national members. This feedback from a larger sample will highlight the magnitude of the problem that is not clearly visible in the literature.

Once some of the reasons are understood, hopefully counselors, school districts and graduate training programs can systematically implement strategies to assist counselors to break down whatever barriers exist so that counselors can ensure they are creating effective school counseling programs to meet all students’ needs so that no child is left behind. The problem for this study is then to find out how involvement with team efforts to use data relate to the how and how much data are used to drive counseling programs and the differences in perceived obstacles
to data collection and use. Poynton states “the need to develop measures that assess barriers and facilitators to data use in schools. The development of a measure that is able to highlight facilitators and barriers to data use can be used to guide professional development and consultation resources, and would be a great benefit to the field” (p. 46, 2009).

What is missing in the literature is just how big of a problem this is for school counselors and what could possibly be the obstacles that prevent them from using data so their students are making progress and that no child is getting left behind. It is important to determine what factors influence school counselors’ use of data and how they are using data. If counselors are not using data as the research and initiatives suggest they should be (Blacher et al., 2005; Holcomb-McCoy et al., 2009; Isaacs, 2003; Young & Kaffenberger, 2011), then more knowledge needs to be acquired to determine the facilitators that promote usage and the obstacles that might be contributing to the lack of usage.

Statement of the Problem

This study approaches the problem that for all the efforts and support for making data driven decisions to improve schools, counselors do not appear to be fully engaging in that process. The only way to improve the situation is to gain a better understanding of what facilitates the use of data by school counselors and what factors inhibit their use of data for better decision-making.

Purpose of the Study

The purpose of this study is to extend the work of the Young and Kaffenberger (2011) investigation of data-related beliefs and practices of school counselors in schools designated as Recognized ASCA Model Program (RAMP) schools. The present study will focus on both RAMP and non-RAMP schools to examine the same six research questions asked of school
counselors by Young and Kaffenberger plus additional areas of exploration: (1) How do school counselors use data? (2) What motivates school counselors to collect and analyze data? (3) What type of data practices do school counselors use to collect and analyze data? (4) How have school counselors been trained to use data? (5) How do school counselors share data? (6) What do school counselors believe about the importance of using data? (7) Are counselors that are involved in any data teams have a higher use of data? (8) Do schools that have any form of school-wide data-based models influence school counselor use of data? (9) What obstacles impede school counselors from using data? Answers to these questions and their interrelationships should extend the research line about the factors that facilitate and hinder the use of data-driven decision making by school counselors.

**Primary Research Questions**

**Question 1.** How do school counselors involved in RAMP Data Teams, Non-RAMP Data Teams, and those not involved in data teams (No Data Teams) differ on factors surrounding the frequency of their use of data?

**Question 2.** How do school counselors involved in RAMP Data Teams, Non-RAMP Data Teams, and those not involved in data teams (No Data Teams) differ on factors surrounding Love’s 4 Conditions for data-based decision-making?

**Question 3.** How do school counselors involved in RAMP Data Teams, Non-RAMP Data Teams, and those not involved in data teams (No Data Teams) differ on obstacles to their usage of data?
**Question 4.** How do school counselors involved in RAMP Data Teams, Non-RAMP Data Teams, and those not involved in data teams (No Data Teams) differ on facilitators to their usage of data?

**Hypotheses**

**Hypothesis 1.** RAMP counselors will use data more frequently than Non-RAMP Data Team counselors and more frequently than No Data Team counselors.

**Hypothesis 2.** RAMP counselors will have higher ratings on the Loves 4 Conditions for data-based decision-making questions than the other two groups.

**Hypothesis 3.** RAMP counselors will have lower ratings for the obstacles to data-based decision-making than the other two groups.

**Hypothesis 4.** RAMP counselors will have higher ratings for the facilitator questions than the other two groups.

**Significance of the Study**

Few studies have explored how counselors use data, what facilitates that use, and the obstacles that school counselors believe impede their use of data. I will more closely examine these issues through the proposed current study.

**Limitations of Study**

Several limitations of this study must be mentioned. First, like many studies of school counselors, the participants were obtained from the ASCA membership and therefore cannot be generalized to all school counselors. Second, because the instrument required self-report,
validity and reliability might have been threatened because of factors such as faulty recall and social desirability. Finally, another possible limitation of this study was the researcher-developed instrument.

**Definitions of Terms**

The following terms are defined because they appear frequently in the literature and research on the field of school counseling and may help to clarify use in this paper.

1. **Accountability.** The use of data collection and dissemination to provide evidence of student achievement and progress that can be directly correlated to the interventions facilitated by the professional school counselor (ASCA, 2005).

2. **Achievement-related data.** Data related to individual student achievement data, such as attendance rate, discipline referrals, or homework completion rate (ASCA, 2005).

3. **ASCA National Model (ANM), 2003.** A comprehensive school counseling program model was created by the American School Counseling Association as a guide for school counselors to use in their school counseling programs (ASCA, 2003).

4. **Council for the Accreditation of Counseling and Related Educational Programs.** CACREP is an independent agency recognized by the Council for Higher Education Accreditation to accredit master’s degree programs in several counseling fields including school counseling. CACREP also accredits doctoral programs in Counselor Education and Supervision. (CACREP, 2009).

5. **DIBELS.** Dynamic Indicators of Basic Early Literacy Skills.

6. **Data-based decision making.** The process of collecting, analyzing, reporting and using data for school improvement and student achievement and success. (Dahlkemper, 2002, p. 1).
7. **Disaggregating data** – separating out variables in the data such as gender, ethnicity, socioeconomic status, or special education status to analyze the performance of all students. (ASCA, 2003).

8. **Evidence-based practice.** That all practical decisions made should 1) be based on research studies and 2) that these research studies are selected and interpreted with practitioner expertise according to some specific norms of the population being studied.

9. **IDEA, 2004 - Individuals with Disabilities Education Act.** A federal law that governs how states and public agencies provide education and related services to children with disabilities.

10. **NCLB, 2001 - No Child Left Behind.** An act to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind.

11. **OBPP, 1999 - Olweus Bullying Prevention Program.** An evidence-based program designed to reduce bullying by improving peer relations and creating a safe and positive school climate.

12. **PBIS/SWPBS, 1997 -Positive Behavioral Interventions and Supports/School-wide Positive Behavior Support (names used interchangeably).** A framework that guides the use of evidence-based academic and behavioral practices for improving academic and behavior outcomes for all students.

13. **RAMP, 2003-Recognized ASCA Model Program.** An evaluation and recognition of those schools that are following the ASCA National Model.

14. **Research based** – research that involves the application of rigorous, systematic procedures to obtain reliable and valid knowledge relevant to education activities and programs.
15. **RtII, 2004 - Response to Instruction and Intervention.** RtII refers to a comprehensive school improvement with multi-tiered system of support whereby student performance is continuously monitored and a continuum of high-quality instruction/intervention are in place for all students, including students with disabilities, to succeed.
Chapter 2

Literature Review

History of School Based Counseling

The history of school based counseling has been a slow evolution. In the 1970s, comprehensive school guidance programs were beginning to be introduced (Jones, et al., 1972; McDaniel, 1970) to systematically look at what and how school counselors provide services. In 1974 and 1981, Gysbers and Moore created manuals to encourage school counselors to provide comprehensive counseling programs to meet the needs of all students. Campbell and Dahir (1997) further specified that programs should facilitate academic, career, and personal social development. Educational reform movements, such as standards-based education and the No Child Left Behind (NCLB) legislation in 2001, helped to raise the awareness about the changes needed to ensure that all students’ needs were being met.

NCLB, 2001. NCLB requires standards-based education in which high standards are set with measurable goals to improve individual student outcomes. Dahir and Stone (2003) state schools must disaggregate data; according to race, gender, and other criteria to accurately report how students are performing as well as allowing counselors’ to monitor students’ progress. Close monitoring is important to help to ensure that progress is made in closing any achievement gaps between disadvantaged students and other groups of students. As a result, the ASCA National Model (2003; 2005) was created. Since NCLB, ASCA has used this as an opportunity to better define the roles of school counselors so that students nationwide can experience the same level of expectations and service.

RtII (IDEA), 2004. Another example of a model of how data can be used to guide instruction and intervention can be seen within IDEA, Individuals with Disabilities Education
Act (2004). IDEA describes a model of instruction and intervention called *Response to Instruction and Intervention* (RtII). RtII is a three-tiered preventative approach to allow for different levels of intervention depending on student responses to lower levels of intensity of intervention. According to RtII, schools should monitor all students, identify at risk students, implement interventions, monitor student progress, adjust interventions based on that progress, and identify students with disabilities (Howell, et al., 2008; Ryan et al., 2011; Trolley, et al., 2009). Tier 1 is the **general curriculum** in which all students are universally screened; curriculum is research based; and assessment and progress monitoring is ongoing to monitor the student needs and make any needed modifications to the curriculum. Tier 2 is the **Intervention Curriculum** in which students that are performing below their peers are identified. Their progress is monitored closely and interventions are adapted if needed. Tier 3 is the **Intensive Curriculum** in which identified students received individualized and specialized instruction within a smaller group setting. A team of individuals work together to increase the students’ performance. Students whose performance still does not improve with this higher level of support are referred to determine whether they are eligible for special education.

The RtII three-tier approach uses data in teams providing a target for teams to utilize. If instruction and/or interventions do not seem to be working, the data assist the teams to adjust their aim and hopefully hit the target needs of each individual student. Kaffenberger et al. (2011, p. 218) highlight the importance of data specifically for counselors. “Data-driven decision making is key in any current counseling program, advocacy, collaboration, and providing for levels of intervention.” Kaffenberger, et al. (2011) specifically relate how the RtII process and data are seen as helpful within the school because teams meet on a regular basis and decisions are based on data and not opinions. Also, Kaffenberger, et al. (2011, p. 220) reported “One
hundred percent of staff surveyed feel that RtII information (graphs, interventions used, universal screening data) is useful in child study.” RtII is consistent with the ASCA National Model. Both strongly emphasize the importance of teams meeting on a regular basis to ensure every student is successful leaving no child left behind.

**ASCA National Model, 2003.** The ASCA National Model (p. 2) states “Historically, many school counselors spend much of their time responding to the needs of a small percentage of students, typically those who were high achievers or who were high risk. ASCA’s National Model outlines a program allowing school counselors to direct services to every student.” The ASCA National Model further delineates that school counseling programs should include four components: guidance curriculum, individual planning, responsive service, and system support. The *guidance curriculum* consists of structured developmental lessons designed to provide all students with knowledge and skills to meet their developmental needs. *Individual student planning* is designed to assist students individually in meeting their personal goals and future plans. The third component is *responsive services*. Responsive services consist of meeting individual students’ immediate needs. Typically responsive services are needed because of immediate situations in the students’ lives. Counselors usually offer individual and group counseling, referral for outside agency support and peer mediation. *Systems support* is the fourth component of the ASCA National Model which is concerned with administering, managing, maintaining and enhancing the counseling program.

The ASCA National Model outlines a model for counseling programs to ensure assistance to meet students’ needs. IDEA discusses how all members within a school should systematically work as a team, including principal, teacher, special education teacher, and counselor. Individuals within schools are no longer expected to work as individuals to help
students be more successful; instead schools are expected to work smarter and more efficiently as teams. The ASCA National Model focuses not only on a team model, but also on the use of data to guide instruction and interventions to more effectively meet all students’ needs.

**Data-based Decision Making Models (DBDM)**

Data-based decision making models have developed from this emphasis on teams using data. There have been several models for DBDM in school counseling (Dahir & Stone, 2003; Isaacs, 2003; Poynton & Carey, 2006; Reynolds & Hines, 2000; Young & Kaffengerber, 2009). Poynton & Carey (2006) reviewed five data-based decision making models – two from outside the field of school counseling and three from within. They then created an integrative model that included the best aspects of the existing DBDM models and connected it to the ASCA National Model. Poynton & Carey (2006) believe that skills in DBDM are new in school counseling practice. In fact, the five programs that were reviewed were written between 2000-2003. Therefore, most of the DBDM models for school counselors have only been around for about ten years. Poynton and Carey created their I.D.E.A.S. model in 2006 and Young and Kaffengerber created the D.A.T.A. model in 2009. Each of the models outlines step-by-step processes that can be used to engage in data-based decision making. There are four critical conditions that Love (2004) stated as necessary for effective data-based decision making in schools: collaborative culture, collaborative structures, widespread data-literacy, and access to useful data.

**Collaborative Culture (Teams).** A collaborative school-wide culture is necessary for school personnel to have data-based discussions so that teams (not just individuals) can focus on improving student success. When teams use data, each person can contribute to pieces of the intervention so that it does not all rest on the classroom teacher. We have all heard the phrases: “It takes a village to raise a child” or “Many hands make light work.” Phrases like these apply
when teams work collaboratively to help students be successful. The ASCA National Model also refer to the importance of collaborative teams in their statement “through data analysis, school counselors, administrators, faculty and advisory council members are able to create a current picture of students and the school environment” (ASCA, 2005, p. 49).

**Collaborative Structure (Scheduled Meetings).** Collaborative structures are important so teams have regularly scheduled meetings for DBDM activities. The DBDM models vary on when and how the members are involved and how often they meet. Under whole school reform models, school counselors need to participate in collaborative structures so data teams are working together for student success. “Effective DBDM can only occur within a school context that facilitates the process” (Poynton & Carey, 2006, p. 126). Research does not actually state how much time should be allocated to collaborative structures (meetings). Poynton & Carey (2006, p. 129) state “sufficient time be allocated so that it will happen with sufficient regularity. DBDM cannot be an ‘add-on’ activity.” They further state the amount of time allotted should be increased by five percent. Love clearly states “the structures have to rest on the foundation of culture, because if we create structures without culture, then folks come together and talk about matters that aren’t at the center of teaching and learning.” (Love, 2004, p. 3.) Collaborative culture and collaborative structure are two important tenets for data-based decision making.

**School-wide Data-literacy (Skills).** School-wide data-literacy is another important aspect outlined by Love. If the entire school is versed in using data then it will make it easier for the school counselor to follow suit. Also, if there is a school-wide expectation, then hopefully all staff members will be involved if there is training supporting the use of data. The ASCA National Model does not list the specific skills needed for DBDM. “School counselors do not have to be skilled statisticians to meaningfully analyze data. Simple percentages can create
powerful pictures of what is happening in the school” (ASCA, 2005, p. 51). The ASCA National Model states the importance of disaggregating the data to determine if there are any groups of students that are not performing as well as others.

The model recommends the use of disaggregated data to drive program and activity development, thus enabling school counselors to intentionally design interventions to meet the needs of all students and to close the gap between specific groups of students and their peers. (ASCA, 2005, p. 10)

Thus, it is important that the school counselor and other team members have school-wide data-literacy skills to ensure that multiple members with multiple perspectives have the necessary skills to collect and understand data, understand and create action plans from that data and evaluate the outcomes.

**Access to Useful Data.** The last condition that Love discusses is the importance of the school personnel to have access to accurate data of student achievement and the conditions within the school that impact student achievement. It is important for data teams to have access to meaningful and useful data. The ASCA National Model states “student database systems are the most common means by which data are collected and stored” (ASCA, 2005, p. 51). Poynton & Carey (2006) report “schools vary widely in both ease of access to student data and the extent to which they routinely engage in the collection of important planning data not typically found in student information systems (e.g., school climate survey data, needs assessment data)” (p. 125). When the entire school operates from a data-driven mindset, it could increase the likelihood that counselors will follow suit.

Love’s (2004) data-based decision making model state four important conditions for effective data-based decision making in schools: collaborative culture, collaborative structures,
school-wide data-literacy, and access to useful data. “Once the ‘enabling conditions’ are understood and addressed to the greatest extent possible, the actual process of DBDM can be engaged” (Poynton & Carey, 2006, p. 126). Love’s four conditions for data-based decision making follow the parameters outlined by NCLB, IDEA and the ASCA National Model. These four conditions could be factors that influence school counselors’ use of data.

**Importance of NCLB, IDEA and the ASCA National Model: School-wide Data Based Models**

School-wide data based models seem to be one aspect that reduces the obstacles of counselors using data. It is the central tenet of national initiatives such as NCLB, IDEA and the ASCA National Model. These initiatives have shown to increase student performance and success (Dee & Jacob, 2010; Lapan, et al., 2001; Lapan, et al., 1997; Porter-Magee, 2004; Sink et al., 2008; Sink & Stroh, 2003). A variety of positive effects have been reported such as a decrease in discipline problems, an increase in student attendance, increased student achievement on standardized state achievement test scores, higher graduation rates, higher ACT average scores, and a higher number of students taking the ACT (Gardner, et al., 1999; Lapan, et al., 2001; Lapan, et al., 1997; Nelson et al., 2007; Sink et al., 2008; Sink & Stroh, 2003). School counselors are now being held to the same higher expectations that other educators have been and are being included more on school-wide data teams. There have also been a number of successful school-wide programs that have evolved out of this data driven model for school improvement and student success - RAMP, SWPBS/PBIS, and Olweus Bully Prevention Program.

**Recognized ASCA Model Program, 2003 (RAMP).** The ASCA National Model is helping counselors to meet these higher expectations by aligning counseling programs with
NCLB and IDEA. Out of the National Model has emerged the Recognized ASCA Model Program (RAMP). This program emphasizes the importance of the same six tenets previously described and particularly emphasizes collaborative efforts to ensure equitable access to research-based education for all students based on data-based decision making. The RAMP schools concept began in 2003 to assess if a school counseling program is following the ASCA National Model. The RAMP process helps schools evaluate how closely their counseling programs align with the evidence-based guidelines outlined in the National Model (ASCA, 2005). It helps schools to evaluate their counseling program and identify areas for improvement in promoting skills and knowledge that promote success for all students. RAMP encourages counselors to collaborate with others (in teams) using data to help students be successful. The use of data is central to the RAMP process (ASCA, 2005, Wilkerson, et al., 2013; Young & Kaffenberger, 2011).

“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.” (Young & Kaffenberger, 2011, p. 68). The benefits of RAMP are “increases skills and knowledge” and “enhances your program’s efforts to contribute to student success.” (see http://www.ascanationalmodel.org/learn-about-ramp). School counselors are also expected to work with others in exploring that data and then share the results of that data with team members (including parents). Ward (2009) investigated 31 elementary schools that received the RAMP designation in Indiana, Georgia and North Carolina. Students in those RAMP schools were significantly higher in overall student achievement, attendance rates, third-grade reading achievement, and third-grade, low-income student reading achievement compared with
corresponding state averages. “Additionally, the reading achievement gap at RAMP schools
decreased by 12 percent from the year prior to when the school received the RAMP designation.
Conversely, corresponding state reading achievement gaps increased by 6 percent over this same
period.” (see http://www.schoolcounselor.org/magazine/blogs/july-august-2010/ramp-and-
student-achievement). RAMP schools work as teams using data to have a positive effect on their
student achievement. Despite several national initiatives (NCLB, RtII, ASCA National Model
and RAMP), the literature suggest that school counselors are still slow to respond to the
importance of data-driven decision making in their counseling programs.

**Positive Behavior Intervention and Supports (PBIS).** Positive Behavior Intervention
and Supports (PBIS) is a collaborative, data-driven school-wide evidence-based program that
focuses on improving academic and behavior outcomes for all students (for more information,
see http://www.pbis.org/school/what_is_swpbs.aspx). PBIS has a team comprised of member
from all areas within the school: administrator, counselor, teacher from each grade level, support
staff and a parent. The PBIS committee meets at least bi-monthly to review data. That
committee creates action plans of interventions that can effect a positive change for specific a
student(s) and/or the school as a whole. They then progress monitor those interventions to
determine if those interventions have been successful. The PBIS committee then share that
information/results with the entire school so that there truly a school-wide participation,
feedback and sharing towards a positive, successful school environment. PBIS tends to collect a
more comprehensive amount and type of data: student-achievement data, achievement-related
data, and standards- and competency-related data. If implemented with high fidelity, PBIS
schools use universal screenings of all students three times per year to identify specific students
that need a Tier 2 or 3 intervention for either internalizing or externalizing behaviors. PBIS uses a lot of data to track student behavior at Tier 1, 2 and 3 levels.

One main way that PBIS tracks behavioral data is with a program called SWIS (School Wide Information System) that tracks all discipline referrals (Tier 1) and allows the user to run a variety of reports to disaggregate the data. Within SWIS, there is also CICO-SWIS (Check-in Check-out), which is a Tier 2 intervention that tracks students’ individual behavior chart to progress monitor if the student’s behavior is improving. Another way in SWIS that PBIS collects data is with ISIS-SWIS. “ISIS-SWIS (Individual Student Information System) completes the comprehensive, three-tiered information system by focusing data entry to Intensive (Tier 3) interventions for individual students. ISIS-SWIS is a decision system for students receiving more intensive supports for academic, social, or mental health services.” (see https://app.swis.org/#isis/informationPage%7B%22school%22:%220D9BCB32-9D27-E311-B84C-0024E874CCF8%22%7D). Through SWIS, CICO-SWIS, and ISIS-SWIS, this three-tiered data system assists the diversified PBIS data team to thoroughly explore data to make decisions to help those students be successful.

Research has shown that schools that implement PBIS with fidelity yield the following benefits: reduced major disciplinary infractions, improvement in aggressive behavior, concentration, pro-social behavior, and emotional regulation, improvements in academic achievement, enhanced perception of organizational health and safety, reductions in teacher reported bullying behavior and peer rejection and improved school climate. (Bradshaw et al., 2010; Horner et al., 2009; Waasdorp, 2012). (see https://www.pbis.org/Common/Cms/files/pbisresources/Mitchell%20-%20CCBD%20Evidence%20base%20for%20PBS.pdf. PBIS is a national initiative that is a
research-based school-wide program where teams get together and look at data to put appropriate RtII interventions in place to help students be successful.

**Olweus Bully Prevention Program (OBPP).** Another comparable program is the Olweus Bully Prevention Program (OBPP, 1999). OBPP is a school-wide evidence-based program designed to reduce and prevent bullying problems and increase a positive climate within our schools (for more information see [http://www.clemson.edu/olweus/](http://www.clemson.edu/olweus/)). OBPP has a well representative team (similar to what was previously mentioned with the PBIS/SWPBS committee) within the school that uses data to determine the needs of the school and all of its students. This team usually meets once per month to look at data and put interventions into place based upon that data. OBPP tends to look primarily only at achievement-related data. During the monthly meetings, they review discipline data to see if there are school-wide or individual problems that the team can discuss and problem solve to make the school environment better.

There has been extensive research on the OBPP (Limber, et al., 2004; Olweus, 1991; Olweus & Limber, 2010). Olweus (1991) conducted the first study from 1983 to 1985 in Norway. He found “marked reductions in students’ self-reports of being bullied (reductions of 62% after 8 months and 64% after 20 months) and bullying others (reductions of 33% after 8 months and 53% after 20 months); reductions in teachers’ and students’ ratings of bullying among students in the classroom; positive program effects for students’ self-reported antisocial behavior (involvement in vandalism, theft, and truancy) and students’ perceptions of positive school climate.” In the United States, (Limber, et al., 2004; Olweus & Limber, 2010) observed a 16% decrease in rates of bullying among students in intervention schools and a 12% increase in bullying among students in comparison schools, resulting in a 28% relative reduction of bullying others in intervention versus comparison schools. Researchers also documented significant
differences between intervention and control schools in self-reported delinquency, vandalism, school misbehavior, and sanctions for school misbehavior.” (Retrieved from http://www.clemson.edu/olweus/researchsummary.pdf). RAMP, PBIS and OBPP are programs that have gained extensive support. It is clear that the use of data driven decisions and collaborative efforts have created a major part of their wide acceptance (Horner, et al., 2005; Lewis-Palmer, et, al., 2002; Luiselli, et al., 2002).

**School Counselors Use of Data**

The use of data has become a foundation of effective school counseling programs because it allows counselors to identify areas in need and to evaluate the effects of those changes (Poynton & Carey, 2006). However, nearly three decades later there are still concerns that counselors are not utilizing comprehensive counseling programs to assist to meet the needs of all students (Goldman, 1992; Holcomb-McCoy, et al., 2009; Poynton, 2009; Poynton & Carey, 2006). The ASCA National Model (2005, p.1) states “Unfortunately, school counseling has lacked a consistent identity from state to state, district to district and even school to school.” There are school counselors who “have resisted efforts to systematically plan, implement, and evaluate their guidance programs” (Lombana, 1985, p. 340). Holcomb-McCoy et al. (2009) state most counselors tend to use *enumerative* data instead of outcomes/process data which is what the ASCA National Model recommends. Typically the enumerative data that counselors collect is number of students served, number of counseling sessions (individual and group) performed, number of classroom lessons conducted, and lists of different programs offered. It is no longer acceptable to just count and list the interventions (enumerative data). We must look at outcome/process data to determine if our interventions are meeting the needs of the students that we are serving.
How Counselors Should Use Data

The ASCA National Model (2003) lists three types of data that school counselors should use: student-achievement data, achievement-related data, and standards- and competency-related data. The ASCA National Model (p. 49-50) lists specifics under those three categories. *Student-achievement data* measure the academic progress of students (e.g. standardized test data, grade point averages, SAT and ACT scores, graduation rates, at or above grade/achievement level in reading, math, etc., passing all classes, promotion and retention rates, drop out rates, completion of specific academic programs - i.e., academic honors, college prep, etc.). *Achievement-related data* are derived from the literature as to those areas correlated to academic achievement (e.g. course enrollment patterns, discipline referrals, suspension rates, alcohol, tobacco and other drug violations, attendance rates, parent or guardian involvement, participation in extracurricular activities, and homework completion rates). *Standards- and competency related data* measure student mastery of the competencies in the ASCA National Standards (e.g. percentage of students with four-year plans on file, percentage of students who have participated in job shadowing, percentage of students who have set and attained academic goals, and percentage of students who apply conflict resolution skills). In addition it also highlights the importance of disaggregating the data. ASCA states you cannot just look at aggregate data (global data from the whole student body). Schools must disaggregate the data to determine if there are any groups that are not achieving as well as others. The ASCA National Model (p. 50) list some of the possible variables that counselors could disaggregate the data; e.g., gender, ethnicity, socio-economic status – free and reduced lunch, vocational – multi-period vocational program track, language spoken at home, special education, grade level, and teacher(s). Disaggregating the data can help to determine if there is equity among all groups and can help to focus the school on
what the needs of an underachieving population might have. This specificity of data usage is important over the general enumerative data that has typically been collected by counselors in the past.

Young and Kaffenberger (2009) offer more specific information as to how school counselors can navigate through data. *Making DATA Work* (Young and Kaffenberger, 2009) breaks down the sections of the workbook by the acronym DATA: Design, Ask, Track, Announce (“Design: What is your question?;” “Ask: How will you answer your question?;” “Track: How will you make sense of the data?;” “Announce: How will you use your findings?;” and “Examples of the DATA process.”) It also includes worksheets to assist counselors in breaking down those tasks of using data. It guides counselors through questions such as “What information or data will be needed to answer the questions?;” “Does the data already exist?;” “What procedures will you follow?;” “Do you need to create data-collection instruments?;” “What is your timeline for planning data collection, making sense of the data and sharing it?” (p. 26-27). *Making Data Work* lists concrete examples along every step of the DATA process. This resource answers the question “How counselors should use data?” Now that we know what the literature says about how counselors should use data, we need to also look at the research to explore counselors’ training, motivation, sharing, and beliefs of data.

**Data Use Training**

If school counselors are not using data, one possible explanation might be that they feel inadequately trained. Blacher et al. (2005) surveyed school counselors in California to explore their assessment practices and their perceptions about the adequacy of their trainings. They stated “despite the training that school counselors receive in their preparation programs and the links between educational testing and counseling, it is not certain whether counselors in the
schools use the assessment skills they were required to learn, know which types of assessment to utilize, and feel adequately trained to use them (p. 337). The report continues “correlation between frequency of use and training were in the low to low moderate range” (p. 339). Two specific outcomes found were in the area of identifying academic achievement and identifying students’ levels of social skills. School counselors reported using few sources and perceived their training to be only adequate. Another disheartening finding was that no training received an excellent rating. Herr (2001) asked, “Are we preparing counselors to use assessments in the most effective way and to understand how assessments are integral to counseling, and do we provide enough opportunities for practicing counselors to upgrade their assessment skills and understandings?” Blacher et al also stated “without proper training, it might be that school counselors are reluctant to make use of necessary techniques and sources. Further study is warranted on how school counselor preparation programs are addressing this issue” (p. 341).

Poynton (2009) also explored professional development training in “Evaluating the Effectiveness of a Professional Development Workshop to Increase School Counselors’ Use of Data: The Role of Technology.” Poynton conducted a professional development workshop designed to determine the benefits of training on the technology of the EZAnalyze program. “EZAnalyze is an ‘Excel Add-In’ that contains data analysis functions necessary to follow the ASCA National Model recommendations for the use of data, and adds a ‘point and click’ user interface to Microsoft Excel” (Poynton, p. 32, 2009). As a result of the workshop, Poynton hypothesized that (a) participants would perform differently over time; (b) participants will engage in actual data use differently; and (c) the use of data by participants will lead to more components of the ASCA National Model being implemented. The results did not support any of those hypotheses. In fact, the group that received the least amount of instructional time
actually engaged more in data usage than any other group. Poynton stated “that factors outside of the professional development workshop can strongly influence results” (p. 43, 2009). Poynton also reported that particular group had counselors from a single school district and that district “is often viewed as a leader in the United States regarding data use and ASCA National Model implementation. Informal conversations with counselors from the district revealed their guidance supervisor required all counselors to complete a ‘data project’” (p. 43, 2009). This could suggest that Love’s (2002) collaborative culture is a facilitator to data usage.

Qualitative results seemed to indicate “the Time, Knowledge, Access and Relevance codes were mentioned as both facilitators and barriers by the participants, Data Focus and Support were mentioned solely as barriers, while Technology and Reason to use data were mentioned only as facilitators to using data” (p. 41, 2009). Poynton stated technology (such as EZAnalyze) might not be the “panacea for school counselors’ data use ailments. As the trends apparent in the literature indicate, a true panacea may not exist” (p. 44, 2009).

Poynton also discusses Love’s (2004) four necessary conditions for data usage: a) collaborative culture, b) collaborative structures, c) wide-spread data literacy, and d) access to useful data. In Poynton’s study, data literacy was the only condition that could have improved. It seems important to determine how Love’s other three conditions can be improved especially since Poynton’s findings did not support that data literacy yields improvement in data usage. Poynton states “The current study contributes to this area of school counseling literature by demonstrating that technology tools alone will not impact school counseling practice if systemic barriers to change (e.g., lack of time) and personal barriers to change (e.g. lack of knowledge) are not simultaneously addressed with the introduction of the technology tool” (2009, p. 44). The barriers and facilitators to counselors using data needs to be understood before trainings and
systems are put into practice (Gruman et al., 2013, Holcomb-McCoy, et al., 2009; Poynton, 2009).

**Motivation to Use Data**

What is the counselors’ motivation to use data? Katz (1993) reminds us that individuals can acquire knowledge and skills (through training) but not have the disposition to use them. Holcomb-McCoy et al. (2009) examined school counselor dispositions that predict data usage. They found that two dispositions were related to data usage: school counselor self-efficacy and general self-efficacy. Holcomb-McCoy (2009) state “Although research has suggested that professional development (i.e. commitment to counseling improvement) and openness to change influence new skill usage, this study’s results indicate that beliefs, more specifically self-efficacy beliefs, could be the determining dispositions of whether a school counselor uses data. The fact that commitment to counseling improvement (e.g., professional development) did not have a significant influence on data usage is an important finding of this study, given the enormous amount of money and time spent on professional development in many school districts. The assumption has been, if school counselors are trained to use data, then they will begin to use data as part of their programming. The results of this study suggest that this assumption is not necessarily true. Perhaps the results reflect the disconnect between extensive training and the actual application of new skills” (p. 348).

In addition to these counselor dispositions, Young & Kaffenberger (2011) found four primary themes to their question, “What motivates RAMP school counselors to collect and analyze data?” The four primary themes were: student needs, program evaluation, advocacy for the profession, and accountability expectations.
**Student needs.** Thirty-one percent of the school counselors’ responses indicated using data helped them to meet their students’ needs. Additionally data help counselors make informed decisions about their interventions to determine if students were academically successful allowing certainty there is equity for all students.

**Program evaluation.** Twenty-four percent of the counselors reported that data allowed them to evaluate their programs and make improvements and make data-based decisions.

**Advocating for the profession.** Advocating for the profession also motivated counselors to use data. Twenty-seven percent reported that data “allows them to advocate for the school counselor position, gain credibility, and demonstrate that school counselors make a difference and to share results data with stakeholders” (Young & Kaffenberger, 2011, p. 71).

**Accountability expectations.** RAMP school counselors reported internal and external motivators. They stated they were required to share data with school and/or district administrators as well as stakeholders. Their motivation was also “driven by their own personal interest and participation in previous in-services that helped them to see the helpfulness of data collection and analysis” (Young & Kaffenberger, 2011, p. 71). So there appears to be possibly several motivators for counselors to use data such as counselor disposition, student needs, program evaluation, advocacy for the profession, and accountability expectations. There does not appear to be one comprehensive study of the larger school counselor population that truly measured the possible motivators for counselors to use data.

**Sharing Data.** Literature states the importance of school counselors sharing data with school boards, the community at large, administrators, teachers, parents and students. (Holcomb-McCoy et al., 2009; Poynton & Carey, 2006; Young & Kaffenberger, 2011). The results of this same literature seem to indicate counselors are not sharing data with these entities like they
should be. Henderson & Mapp (2002) state the sharing of data with parents and stakeholders is a necessary component to building successful parent-school relationships for students to be successful. The literature reports that school counselors rarely report data to parents. Leading us to believe they are less likely to report data to the students they serve (Young & Kaffenberger, 2011). The sharing of data is important to show others (especially students) progress has been made or the progress that needs to be made.

**School Counselor Beliefs About Data**

In this current movement in the usage of data, counselors now seem to be starting to believe the importance of using data in their counseling programs. In the Young & Kaffenberger (2011) study, there were four themes that RAMP counselors reported as their most important reasons that they use data: student needs, program evaluation, advocacy for the profession, and accountability expectations. Thirty-seven percent of the respondents listed the student needs and 40% listed program evaluation as the most important to the RAMP school counselors. Advocacy for the profession (17%) and accountability expectations (6%) did not seem as important as the two previously discussed. School counselors appear to believe that data are important to their counseling program; however, some research reports that there seem to be obstacles preventing counselors from using the very same data counselors believe is important.

**What Are The Obstacles to School Counselors Using Data**

The research has suggested several possible obstacles creating these inconsistencies in use of data among school counselors. Poynton & Carey (2006, p. 122) state “While the ASCA National Model identifies the necessity of school counseling program evaluation using quantitative methods for both planning and accountability, the model lacks practical procedures and techniques for actually engaging in those data-use activities.” The ASCA National Model
clearly defines what type of data are used and how to use that data; however, it does not explain how to actually manipulate that data and determine how to develop effective school counseling programs. This could be one of the reasons that not all school counselors use data despite the evidence in the research and with the pressure from national initiatives.

Other possible obstacles maybe the counselor’s access to data and how much data are emphasized and used within their school. The ASCA National Model states schools have data on student achievement and student perceptions of their performance. Schools vary widely in both the accessibility to student data and how regularly it is accessed (Poynton & Carey, 2006). If accessibility to data are laborious and/or not supported within the school systems, it makes it more difficult for the school counselor to utilize the data. Even if the accessibility to data are easy, if the school culture does not collectively review data on a routine basis, this could be an obstacle for the school counselor to independently initiate using data.

A fourth possible obstacle found in the research is that in the past, school counselors have not been held accountable the same way that teachers have been. Therefore, if school counselors are not held as accountable as teachers are then this could deter counselors from needing to use data. If administrators are not expecting counselors to use data, then there is not much incentive for counselors. Counselors need to be held to the same expectation as teachers in regards to using data to show the effectiveness of their school counseling programming to assist in the academic success of all of their students.

Counselors are not usually included on school improvement team meetings (Dahir & Stone, 2003). If school counselors are not part of school data teams, this could pose another possible obstacle for them to initiate their usage of data independently. It also limits the
counselors’ knowledge of the schools’ data if they are not being included in these data team meetings. Counselors need to be integral members of the data teams within their schools.

A sixth possible obstacle is that counselors may lack the skills to use data. Poynton and Carey (2006) report that many school counselors lack the necessary skills. They also state that the necessary knowledge and skills are not elaborated upon from the ASCA National Model. Poynton and Carey (2006) states counselor education programs do not teach these knowledge and skills as part of their curriculum. Obviously, if school counselors lack the knowledge and skills, they could be more reluctant to use data or even worse inaccurately using data could prove to be a complete failure. Holcomb-McCoy et al., (2009) found that just because counselors are trained in using data their research did not show that counselors actually applied these new skills.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) has tried to address the concerns stated by Poynton and Carey. CACREP created standards in 2001 to assess if educational institutions have high academic standards for its counselors-in-training. The CACREP Standards were written to ensure that students master the knowledge and skills to be effective counselors. An institution that has obtained CACREP accreditation shows a commitment to high academic standards. Assessment and research and program evaluation are two components that are specifically addressed in the CACREP standards.

McGlothin and Davis (2004) conducted a study to evaluate the perceived benefit of the CACREP core curriculum standards. They asked a randomized sample of 641 members from the American Mental Health Association (AMHA), American School Counselor Association (ASCA) and Association for Counselor Education and Supervision (ACES) about their perceived benefit of the core curriculum standards of CACREP. Respondents were asked to indicate which
of the eight CACREP (2001) core curriculum standards were most beneficial to professional practice. Helping Relationships was rated as the most important standard (n= 243, 37.9%). Research and Program Evaluation (n = 178, 27.8%) was rated as the least beneficial CACREP core curriculum standards. Counselor educators perceived this standard as significantly (p < .05) more beneficial than did school counselors and mental health counselors. These findings coincide with how individuals score on the National Counselor Examination (NCE). Loesch and Vacc (1994) found that counselors who took the NCE typically scored lowest on the questions pertaining to career, research, and assessment. It is good that counselor educators seem to understand the importance of research and program evaluation. More work appears to be needed as to their importance so that those practitioners in the field have a better understanding of how important research and program evaluation truly are for the profession.

A seventh possible obstacle is noted in the research of Holcomb-McCoy, et al. (2009). They found that counselor disposition was the biggest predictor of data usage. This study used a convenience sample and had a small sample size. Holcomb-McCoy, et al. (2009) also reported that researchers need to examine the usage of data based on counselor dispositions and school factors. They used the definition of professional disposition from the National Council for Accreditation in Teacher Education (NCATE). NCATE (2008) define professional disposition as “values and beliefs demonstrated through verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities” (p. 89). Katz (1993) also discusses that individuals are able to learn the knowledge and skills but it is their dispositions that determine whether they decide to use or not use that knowledge and skills. Holcomb-McCoy, et al. (2009) state that CACREP (2001) does not require educational institutions to
assess school counselor dispositions. That lack of emphasis from CACREP could increase the possibility of counselor disposition being an obstacle in their use of data.

Blacher et al. (2005) state another possible reason is that school counselors, administrators and other educational professionals do not believe that assessment is the role of the school counselor. If school counselors (or others) do not believe that their role should not include assessment, then counselors could be less likely to engage in assessment activities.

These are many possible reasons that school counselors do not use data. The ASCA National Model also lists obstacles that a school district commented as their school counseling program was going through the process of following the ASCA National Model. Some of the obstacles listed were “Facing fear of failure;” “Learning what results-based really mean;” “I felt guilty initially when I stopped enabling my administrators when doing non-school counseling activities.” Other reasons suggested in the literature include “Not even aware of importance/lack of value;” “Fear of reprisal;” “Case load;” “Amount of paperwork;” “Years of experience;” “Self-efficacy;” “Lack of time;” “Lack of scheduled meetings to look at data;” and “Use of technology” (Bauman, 2004; Bodenhorn, et al., 2010; Lee & Workman, 1992; Whiston & Quinby, 2009). We do not have empirical evidence about the obstacles counselors feel impede their use of data. Nor do we have data about the magnitude of the problem.

**Conclusion**

This chapter provided a review of the literature on the school counselors’ beliefs, training and use of data and the contributing variables to the obstacles that counselors face in their usage of data.
Chapter 3

Methodology

The data for this descriptive study were used to examine school counselors’ use of data. The participants completed a 55-item online survey about their perceived beliefs and practices of school counselors’ use of data. Differences were explored among three groups: RAMP data team counselors; non-RAMP data team counselors; and no data team counselors. The survey was used to answer the following research hypotheses:

Hypothesis 1. RAMP counselors will use data more frequently than non-RAMP data team counselors and more frequently than no data team counselors.

Hypothesis 2. RAMP counselors will have higher ratings on the Loves 4 Conditions for data-based decision-making questions than the other two groups.

Hypothesis 3. RAMP counselors will have lower ratings for the obstacles to data-based decision-making than the other two groups.

Hypothesis 4. RAMP counselors will have higher ratings for the facilitator questions than the other two groups.

Data will be analyzed using basic descriptive statistics and ANOVA.

Participants

The ASCA online directory was used for a membership list of all school counselors in the United States. It was determined that with a population size of 20,130 school counselor ASCA members that the recommended sample size is 377. (www.raosoft.com/samplesize.html). In order to ensure that there were at least 30 participants to have a sub group of RAMP counselors
and a sub group of PBIS counselors, the top five states were chosen. The top five states with the most RAMP schools were Indiana (113 schools); Georgia (85 schools); North Carolina (54 schools); Virginia (48 schools); and Illinois (30 schools). The top five states (see Figure 3.1) with the most PBIS schools were Illinois (804 schools); North Carolina (691 schools); Maryland (574 schools); Colorado (543 schools); and Oregon (398 schools). Illinois and North Carolina made the top five states for both the RAMP and the PBIS lists. Therefore, eight states from the ASCA membership list were used which consisted of 4,100 school counselor ASCA members. All 4,100 counselors were emailed a link to the survey to enhance the possibility that 377 participants and 30 participants each for the RAMP and the PBIS sub groups would be obtained. The 4,100 members were emailed a link to Qualtrics for a brief cover letter (Appendix B) explaining the nature of the study, a description to assure confidentiality, and an electronic survey. Two follow up emails were made every two weeks after the first contact. That yielded 120 respondents. So emails were sent to counselors in Virginia and Pennsylvania for an additional 2,015 members thus totaling 6,115 ASCA members surveyed. A link to the survey was also sent out to a closed online counseling group on Facebook. A total of 406 surveys were completed.
<table>
<thead>
<tr>
<th>States</th>
<th>ASCA Members</th>
<th>RAMP Schools</th>
<th>RAMP ASCA Members</th>
<th>PBIS Schools</th>
</tr>
</thead>
<tbody>
<tr>
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<td>14</td>
<td>14</td>
<td>543</td>
</tr>
<tr>
<td>Georgia</td>
<td>931</td>
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<td>41</td>
<td>171</td>
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<td>Illinois</td>
<td>713</td>
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<td>19</td>
<td>804</td>
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<td>Oregon</td>
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<tr>
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<td>204</td>
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<tr>
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<td><strong>390</strong></td>
<td><strong>148</strong></td>
<td><strong>3385</strong></td>
</tr>
</tbody>
</table>

*Figure 3.1* Counselors by State: ASCA Members, RAMP Schools, RAMP ASCA Members & PBIS Schools
**Instrumentation**

The Data Beliefs and Practices Survey (DBAPS) by Young & Kaffenberger (2011) was used. The DBAPS consists of 20 items. Young and Kaffenberger reviewed the literature to develop their survey and then adapted the survey after piloting it with 250 RAMP school counselors. They did this over a three-year time period during training workshops with RAMP counselors. RAMP school counselors were used because of their validated use of data as evident through their national recognition. Thirteen items ($\alpha = .93$) comprise a scale assessing counselors’ perceptions of data practices and uses. Items are rated using a 7-point Likert scale with the anchors ranging from 1 (strongly disagree) to 7 (strongly agree). Young & Kaffenberger (2011) give examples of some of the items used to assess the practices of school counselors such as “I use data to identify barriers that impede student performance,” and “I regularly review my school’s data (academic, attendance, behavior) to identify gaps.” Three items required participants to check all that apply and assessed how counselors were trained and how they share and report data. Two open-ended questions assessed school counselors’ reasons and motivation to use data. Those questions were (a) “What are the three most important reasons you use data?” and (b) “What motivates you to use data?”

Because Young and Kaffenberger (2011) worded the survey in terms of the time at which the school became a RAMP school, it was necessary to provide an introductory statement so that the survey made sense to non-RAMP school counselors. Specifically, respondents were asked to provide answers in reference to the time period since ASCA created the ASCA national model.

**Introduction for the Survey**
In 2003 and 2005, the American School Counselor Association (ASCA) created the ASCA National Model which outlines what school counseling programs should include. There are four elements of the National Model: (a) Foundation; (b) Delivery System; (c) Management Systems; and (d) Accountability. Under the element of Management Systems, the use of data in school counseling programs is further described. Please answer the questions to the following survey in regards to after the 2005 ASCA National Model was presented.

The first thirteen questions of the Young and Kaffenberger survey were used. Their next three questions were also used; however, the response options were changed in an attempt to quantify the responses as opposed to their “check all that apply” option. “How well do you believe you were trained to use data?” had a 6-point Likert scale response (no training to extremely well). “I regularly share data with…” and “I report data to stakeholders using…” had a 7-point Likert scale response (strongly agree to strongly disagree).

The eighteen additional items focused on obstacles and facilitators, frequency of data usage, data teams, school-wide initiatives, and Love’s 4 Conditions of data-based decision making. The additional items were asked based on a review of the literature (Love, 2004, Poynton, 2009) as well as revised items from existing instruments (Holcomb-McCoy et al., 2009) in an attempt to understand what obstacles and facilitators could be limiting/promoting counselors’ data usage. A review of the literature showed that most of the previous studies do not really quantify their information about actual data usage. Previous studies use words like “rarely”, “some of the time”, “low rate”, etc. (Holcomb-McCoy, et al., 2009; Poynton, 2009) to describe how much data are used. The new items in this study were used to quantify the frequency of data used by giving more specific amounts of time such as daily, biweekly, weekly,
etc. so that the reader knows exactly how often data is used instead of a vague description such as “some of the time.” Additional questions were asked to obtain information about their data teams and their usage.

A sample of the eighteen additional questions added for the present study: “How often do you look at data?”; “I am a member of a team that looks at data?”; “If you are a member of a team(s) who looks at data, how often do you meet to look at data?”; “What obstacles impede your own personal use of data?”; and “Does your school participate in any school-wide initiatives?” Five questions were asked about school climate questions to determine if Love’s (2004) four conditions of data-based decision making impacted counselors’ data beliefs and practices: “Do you believe that your school has a collaborative culture where staff members have shared norms and values that focus on collaboration for student learning?”; “Do you believe that your school has collaborative structures where staff members meet as teams to discuss data (i.e. study groups, grade level teams, school-based mathematics, reading and science leadership teams, etc).?”; “Do you believe that your school has wide-spread staff confidence and skills in understanding and interpreting data?”; and “Do you believe that your school has: (A). Timely access to useful data (getting the data in time to respond to it)?” and (B) “Easy access to useful data (not some place behind lock and key)?” For a complete list of the survey items, see Appendix C. (**before questions denotes that they are new questions asked for this survey.)

After the DBAPS was revised, four counselor educators (including the original authors; Young and Kaffenberger) and three supervisors of school counselors reviewed the survey for clarity and content validity. Reviewers suggested minor revisions and supported the DBAPS. The DBAPS was then piloted with eight school counselors. After they completed the survey, a cognitive interview was conducted to obtain feedback and slight changes were made to the
instrument. Reliability was determined for the 13 DBAPS Likert response scale items using a Cronbach’s alpha ($\alpha=.926$).

**Data Analysis**

Descriptive statistics (i.e., means and standard deviations) were calculated for each item as well as the summated scale of Young & Kaffenberger’s 13 original items. Also, to determine whether there were any differences among the respondents, a series of analyses of variance (ANOVAs) examined differences in overall data usage by years of experience, gender, ethnicity, school level, data teams (RAMP data teams, non-RAMP data teams and no data teams), and school climate. Data were screened for possible outliers, linearity and normality.
Chapter 4

Results

The purpose of this study was to examine the beliefs and practices of school counselors’ use of data. This chapter summarizes the data, collected through an online survey, and the data analysis results. This chapter includes the descriptive statistics, an overview of the procedures for cleaning the data, summarizes the analysis of variance procedures and outcomes, and other statistical analyses pertaining to the following research questions:

**Question 1.** Will RAMP counselors use data more frequently than non-RAMP data team counselors and more frequently than no data team counselors?

**Question 2.** Will RAMP counselors have higher ratings on the Loves 4 Conditions for data-based decision-making questions than the other two groups?

**Question 3.** Will RAMP counselors have lower ratings for the obstacles to data-based decision-making than the other two groups?

**Question 4.** Will RAMP counselors have higher ratings for the “facilitator” questions than the other two groups?

**Descriptive Statistics/Preliminary Analysis**

The online survey was emailed through [www.qualtrics.com](http://www.qualtrics.com). A total of 406 participants took part in the survey. Given the population size of 20,130 ASCA members, 377 was the recommended sample size with a 95% confidence level ([www.raosoft.com](http://www.raosoft.com)).

**Assumptions for analysis.** The data were examined to assess whether assumptions for the use of ANOVA were met as described by Tabachnick and Fidell (2007). By examining box plots and by examining results from the SPSS Explore program it was judged that the assumption of normality was met.
**Missing data.** The amount of non-response was investigated. For the 13 items that measured counselors’ perceptions of data practices, there were 33 participants that didn’t respond (8%). Training questions; sharing data questions; and how often do you share data had 9% of the participants not respond to those questions. The facilitator and obstacle questions, data team questions and Love’s 4 Conditions have 16% of the participants not respond to those questions. The researcher used the pairwise option in SPSS when analyzing the data which results in different numbers of people being reported for different variables or items on the survey. There was no replacement of missing data.

**Descriptive Statistics: Counselors Self-Reported Use of Data**

Demographic information is included in Table 1. A majority of the sample was counselors at the elementary level (64%); followed by middle (23%); and high school level (21%). Respondents were able to choose more than one level for the question of “What student population do you serve?”; therefore, the numbers total more than 100%. The numbers were also rounded. The number of years in the profession was fairly equally distributed among the categories.; (0-2, 19%; 3-5, 15%; 6-8, 15%; 9-11, 18%; 12-14, 9%; 15-17, 9%; and 18 or more years 12%). According to the 2011 National Survey of School Counselors, 77% are female and 23% are male school counselors (College Board National Office for School Counselor Advocacy, 2011). The sample in this study was predominantly female (93%), with only 6% of the participants being male; therefore, the results of this study would apply more to female counselors in elementary schools. Ethnicity was primarily Caucasian (81%); followed Black/African American (12%); Latino (3%); and Asian .5%. “Approximately how many students are on your caseload?” was coded as 1=1-99 (11%); 2=100-199 (6%); 3=200-299 (12%); 4=300-399 (17%); 5=400-499 (21%); 6=500-599 (12%); 7=600-699 (7%); 8=700-799
(4%); 9=800-899 (1%); 10=900-999 (.09%); 11=1000 or more (2%) with 400 as the mean (SD=241).
Table 1

Demographics

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<td>300-399</td>
<td>70</td>
<td>17.2</td>
</tr>
<tr>
<td>400-499</td>
<td>86</td>
<td>21.1</td>
</tr>
<tr>
<td>500-599</td>
<td>49</td>
<td>12.0</td>
</tr>
<tr>
<td>600-699</td>
<td>31</td>
<td>7.6</td>
</tr>
<tr>
<td>700-799</td>
<td>19</td>
<td>4.6</td>
</tr>
<tr>
<td>800-899</td>
<td>8</td>
<td>1.9</td>
</tr>
<tr>
<td>900-999</td>
<td>4</td>
<td>.09</td>
</tr>
<tr>
<td>1000 or &gt;</td>
<td>11</td>
<td>2.7</td>
</tr>
</tbody>
</table>
There were eight states chosen (Colorado, Georgia, Illinois, Indiana, Maryland, North Carolina, Oregon, and Virginia) for the sample because of their high rate of participation in either RAMP or PBIS in an attempt to achieve a large enough sample (hopefully 25 or greater) in those subgroups. In order to obtain more responses, Pennsylvania was also targeted. Those in the targeted states that responded to the survey comprised 54% of the responses. Georgia had the most participants (n=66, 16%); Pennsylvania (n=46, 11%); North Carolina (n=36, 8%); Colorado (n=30, 7%); Indiana (n=15, 3%); Illinois (n=14, 3%); Maryland (n=12, 3%); Virginia (n=9, 2%) and Oregon (n=5, 1%). The remaining 46% of the participants were reported from 40 different states.

13 Statements of How Do School Counselors Use Data?

There were 13 statements that were used from the Young and Kaffenberger (2011) survey (α=.93). The Cronbach’s alpha assesses the internal consistency or reliability of the summed Likert score generated from these 13 statements. An internal consistency of .70 or higher is recommended (Cronbach, 1951). These 13 statements were then used in the current study to create a subscale to provide a profile regarding counselors’ self-reported data usage (α=.926) using the 7-point Likert scale with anchors ranging from 1 = strongly agree to 7 = strongly disagree. The Cronbach’s alpha of .926 in the current study meets the .70 or higher that is recommended which indicates the summed Likert score obtained from summing responses across the 13 items is considered to be internally consistent. Descriptive statistics suggest that school counselors in this survey reported on average neutral data usage (M=4.47; SD =1.67) – neither agree nor disagree to slightly agree) in their school counseling programs. The individual item and summed Likert score means and standard deviations are presented in Table 2.
When combining the two highest response scale options (6 = somewhat agree and 7=strongly agree), thirty-seven percent (n=113) reported that they somewhat agreed or strongly agreed they have increased their use of data (M=4.94; SD =1.59). Almost forty percent somewhat agreed or strongly agreed they regularly review their school’s data, and that they use data to inform and facilitate the programs they lead (M=4.9; SD =1.63). About thirty percent somewhat agreed or strongly agreed they use data to identify barriers that impede student performance (M=4.71; SD=1.55) (see Table 3).
Table 2

Responses to 13 questions on perceived data usage

<table>
<thead>
<tr>
<th></th>
<th>Current study Results</th>
<th>Young &amp; Kaffenberger Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>I have increased my use of data to demonstrate the effectiveness of my school counseling program.</td>
<td>373</td>
<td>4.94</td>
</tr>
<tr>
<td>I have maintained my momentum to use data.</td>
<td>373</td>
<td>4.39</td>
</tr>
<tr>
<td>I use data to identify barriers that impede student performance.</td>
<td>373</td>
<td>4.71</td>
</tr>
<tr>
<td>I regularly review my school's data (academic, attendance, behavior) to identify gaps.</td>
<td>373</td>
<td>4.90</td>
</tr>
<tr>
<td>I use data to inform and facilitate the school counseling services and programs that I lead.</td>
<td>373</td>
<td>4.93</td>
</tr>
<tr>
<td>I use quantitative data collection methods to improve my school counseling services/programs.</td>
<td>373</td>
<td>4.61</td>
</tr>
<tr>
<td>I use qualitative data collection methods to improve my school counseling services/programs.</td>
<td>373</td>
<td>4.76</td>
</tr>
<tr>
<td>I analyze the data I collect.</td>
<td>373</td>
<td>5.07</td>
</tr>
<tr>
<td>Our school counseling department uses data to set strategic goals.</td>
<td>373</td>
<td>4.14</td>
</tr>
<tr>
<td>I use data to close achievement gaps that exist at my school.</td>
<td>373</td>
<td>4.47</td>
</tr>
<tr>
<td>I use data to evaluate student enrollment patterns.</td>
<td>373</td>
<td>3.27</td>
</tr>
<tr>
<td>I frequently conduct pre- and post-tests when facilitating classroom guidance lessons, workshops, and small group counseling interventions.</td>
<td>373</td>
<td>4.24</td>
</tr>
<tr>
<td>I use data to prepare students for college readiness.</td>
<td>373</td>
<td>3.73</td>
</tr>
<tr>
<td>TOTAL</td>
<td>373</td>
<td>58.1</td>
</tr>
<tr>
<td>Mean</td>
<td>4.47</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Responses to 13 questions on perceived data usage response scale was 1=strongly disagree; 2=somewhat disagree; 3=slightly disagree; 4=neither agree or disagree; 5=slightly agree; 6=somewhat agree; 7=strongly agree
Table 3

Percent of School Counselors with a combined score on the “Agree” or “Strongly Agree” rating

<table>
<thead>
<tr>
<th>Statement</th>
<th>n</th>
<th>Current Study Results</th>
<th>n</th>
<th>Young &amp; Kaffenger Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have increased my use of data to demonstrate the effectiveness of my school counseling program.</td>
<td>373</td>
<td>37.2%</td>
<td>113</td>
<td>90.3%</td>
</tr>
<tr>
<td>I have maintained my momentum to use data.</td>
<td>373</td>
<td>24.8%</td>
<td>113</td>
<td>83.4%</td>
</tr>
<tr>
<td>I use data to identify barriers that impede student performance.</td>
<td>373</td>
<td>30.3%</td>
<td>113</td>
<td>88.6%</td>
</tr>
<tr>
<td>I regularly review my school’s data (academic, attendance, behavior) to identify gaps.</td>
<td>373</td>
<td>39.9%</td>
<td>113</td>
<td>85.1%</td>
</tr>
<tr>
<td>I use data to inform and facilitate the school counseling services and programs that I lead.</td>
<td>373</td>
<td>36.5%</td>
<td>113</td>
<td>90.3%</td>
</tr>
<tr>
<td>I use quantitative data collection methods to improve my school counseling services/programs.</td>
<td>373</td>
<td>30.0%</td>
<td>112</td>
<td>84.2%</td>
</tr>
<tr>
<td>I use qualitative data collection methods to improve my school counseling services/programs.</td>
<td>373</td>
<td>31.0%</td>
<td>112</td>
<td>86.8%</td>
</tr>
<tr>
<td>I analyze the data I collect.</td>
<td>373</td>
<td>42.1%</td>
<td>112</td>
<td>92.1%</td>
</tr>
<tr>
<td>Our school counseling department uses data to set strategic goals.</td>
<td>373</td>
<td>24.1%</td>
<td>109</td>
<td>82.5%</td>
</tr>
<tr>
<td>I use data to close achievement gaps that exist at my school.</td>
<td>373</td>
<td>28.8%</td>
<td>112</td>
<td>84.2%</td>
</tr>
<tr>
<td>I use data to evaluate student enrollment patterns.</td>
<td>373</td>
<td>13.8%</td>
<td>111</td>
<td>42.1%</td>
</tr>
<tr>
<td>I frequently conduct pre- and post-tests when facilitating classroom guidance lessons, workshops, and small group counseling interventions.</td>
<td>373</td>
<td>28.3%</td>
<td>112</td>
<td>78.0%</td>
</tr>
<tr>
<td>I use data to prepare students for college readiness.</td>
<td>373</td>
<td>19.4%</td>
<td>112</td>
<td>51.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>386.12/13</td>
<td>29.7%</td>
<td>1039.4/13</td>
<td>79.9%</td>
</tr>
<tr>
<td>Mean</td>
<td>29.7%</td>
<td>Mean</td>
<td>79.9%</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.08</td>
<td>SD</td>
<td>.15</td>
<td></td>
</tr>
</tbody>
</table>
What types of methods are used by school counselors to collect and analyze data?

Thirty percent of respondents somewhat agreed or strongly agreed they use quantitative data collection methods to improve their school counseling services/programs” (M=4.61, SD = 1.56). Thirty-one percent of respondents somewhat agreed or strongly agreed they use qualitative data collection methods to improve their school counseling services/program (M=4.76, SD = 1.53). Forty-two percent of respondents (n=373) somewhat agreed or strongly agreed they analyze the data that they collect (M=5.07, SD = 1.55). Twenty-eight percent of respondents (n=373) somewhat agreed or strongly agreed they conduct pre- and post-test when facilitating classroom guidance lessons, workshops, and small group counseling interventions (M = 4.24, SD = 1.91).

How are school counselors trained to use data?

Graduate school. Using a 7-point Likert-scale ranging from 1 = “no training” to 7 = “extremely well”, eighty-five percent (n=366; M=3.02-fairly well, SD = 1.55) of the school counselors surveyed rated a “2” or greater that they received training in using data during graduate school (see Table 4). To explore how counselors are trained, the top two ratings of 6 and 7 were combined and the bottom two ratings of 1 and 2 were combined. Combining the two highest response scale ratings, eighteen percent (n=74) reported that they were trained very well to extremely well (see Table 4). Whereas combining the two lowest response categories scores, forty-eight percent (n=178) of counselors reported that they received very little to no training in graduate school.

Professional development. Seventy-eight percent (n=366; M=2.67-fairly well, SD = 1.41) of the school counselors rated a “2” or greater that they received data training as part of professional development trainings within their school districts. Combining the two highest
response scale values, twelve percent (n=51) reported their professional development training as very well and extremely well. Whereas combining the two lowest response scale values, fifty-four percent reported very little to no training through professional development training within their school districts.

**State/National conferences.** Seventy-nine percent (n=366; M=2.81-fairly well, SD = 1.43) rated a “2” or greater that they received training at various conferences. Combining the two highest response scale values, twelve percent (n=51) reported their training at various conferences as very well or extremely well. Whereas combining the two lowest response scale values, forty-six percent (n=170) reported very little to no training at various conferences.

Looking at the lowest rating of “no training”, thirteen percent of counselors answered that they have received no training in graduate school (n=55); 19.5% (n=79) in district professional development and 19% (n=77) at state/national conferences.

Table 4

<table>
<thead>
<tr>
<th>How Are School Counselors Trained?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How are school counselors trained? response scale was 1=no training; 2=very little; 3=fairly well; 4=quite well; 5=very well; 6=extremely well</strong></td>
<td><strong>Table 4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How Are School Counselors Trained?</th>
<th>n</th>
<th>MEAN</th>
<th>SD</th>
<th>LITTLE/NO TRAINING COMBINED 1 &amp; 2 RATING</th>
<th>VERY/EXTREMELY WELL TRAINED COMBINED 6 &amp; 7 RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate School</td>
<td>366</td>
<td>3.02</td>
<td>1.55</td>
<td>48.6%</td>
<td>18.3%</td>
</tr>
<tr>
<td>District Professional Development</td>
<td>366</td>
<td>2.67</td>
<td>1.14</td>
<td>54.4%</td>
<td>12.5%</td>
</tr>
<tr>
<td>State/National conference</td>
<td>366</td>
<td>2.81</td>
<td>1.43</td>
<td>46.4%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>
How do school counselors share data?

Ninety-five percent (n=346, M=5.35, SD = 1.68) of the school counselors rated a “2” or greater that they share data with their administrator; 94% (n=345, M=4.94, SD = 1.63) with teachers; 93% (n=339, M=4.97, SD = 1.82) with other counselors; 93% (n=338, M=4.40, SD = 1.77) with parents and (91%, n=333, M=4.42, SD = 1.78) with their students. There were six percent (n=27, M=2.99, SD = 1.99) that reported that they do not share data with stakeholders. School counselors are more likely to share data in a narrative format (88%, n=325, M=4.97, SD=1.89) as opposed to charts (80%, n=292, M=4.23, SD = 2.11) and graphs (78%, n=286, M=4.25, SD =2.17), though most use multiple forms for sharing.

What obstacles impede/facilitate your use of data?

There were six questions asked to determine “What obstacles impede/facilitate your use of data?” (see Table 5). A seven point Likert scale was used with 1 (impedes my use of data) to 7 (facilitates my use of data). “Time available to use data in my school” had the lowest rating (n=340; M=3.00; SD =1.75) and “My access to data in my school” had the highest rating (n=340; M=4.47; SD =1.82). The remaining questions were “Availability to data teams in my school” (n=340; M=3.89; SD = 1.92); “Data use culture at my school” (n=340; M=4.18; SD =1.80); “My level of data skills” (n=340; M=4.43; SD =1.82); “Importance of data use in my school” (n=340; M=4.45;SD =1.80); and “My access to data in my school” (n=340; M=4.47; SD =1.82).

To try to determine what the highest impeding obstacles are, the rating response scale values of 1 & 2 were combined to determine the highest impeding obstacles as “Time available” (47%); “Availability” (29%); “Data use culture” (21%); “Importance” (19%); “Access” (17%) and “Data skills” (17%). The response scale ratings of 6 & 7 were combined to determine the highly
facilitative ratings as “Data skills” (31%); “Importance of data” (30%); “Access” (30%); “Data use culture” (23%); “Availability” (22%); and “Time” (9%).

Table 5
Perceived Obstacles and Facilitators to Data Usage - (descriptive statistics)- n=340

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>MEAN</th>
<th>OBSTACLES COMBINED 1 &amp; 2 RATING</th>
<th>FACILITATORS COMBINED 6 &amp; 7 RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time available to use data in my school</td>
<td>3.00</td>
<td>47.9</td>
<td>9.6</td>
</tr>
<tr>
<td>Importance of data use in my school</td>
<td>4.45</td>
<td>19.1</td>
<td>30.5</td>
</tr>
<tr>
<td>My level of data skills</td>
<td>4.43</td>
<td>17.1</td>
<td>31.3</td>
</tr>
<tr>
<td>My access to data in my school</td>
<td>4.47</td>
<td>17.4</td>
<td>30.3</td>
</tr>
<tr>
<td>Data use culture at my school</td>
<td>4.18</td>
<td>21.2</td>
<td>23.9</td>
</tr>
<tr>
<td>Availability to data teams in my school</td>
<td>3.89</td>
<td>28.8</td>
<td>22.1</td>
</tr>
</tbody>
</table>

Responses to 13 questions on perceived obstacles and facilitators to data usage response scale was:
1=impedes my use of data; 7=facilitates my use of data

ANOVA. Differences in four dependent variables were examined using a series of four separate one-way ANOVA analyses. The four dependent variables were individual counselor data usage, data team data usage, Love’s 4 Conditions Index score and Facilitator-Obstacle Index score. The independent variable used in the ANOVA analyses was team membership of the counselor (RAMP data team counselor, non-RAMP data team counselor and no data team counselor).

Primary Analysis
**Hypothesis 1.** RAMP counselors will use data more frequently than non-RAMP data team counselors and the no data team counselors. It was of interest to examine whether the frequency of data use by counselors differed by counselor’s different school situations (RAMP school, Non-RAMP school or No Data Use Team School). Research suggests that RAMP counselors and data team counselors can have a positive influence on student success, and the research of Young & Kaffenberger (2011) showed a high rate (about 90%) of RAMP school counselors using data.

In the current study, the three sub groups had enough members for each group to be able to explore them as individual subgroups; RAMP group (n=33); non-RAMP group (n=290); and no data group (n=43). The mean “individual usage” score for the entire sample was 5.29 (SD=1.95), which represents bimonthly to weekly usage.

One-way ANOVA was used to provide information for the hypothesis. In this analysis, the three counselor groups based on their school data use situation served as the independent variable in the analysis. Their responses to the single data usage item served as the dependent variable. Bishop and Herron (2015) provide an extensive review of the issues related to treating a single Likert response scale item as representing interval type data. Carifo and Perla (2008) indicate the F test in ANOVA F-generally is robust with regard to ordinal data. Achen (2005) indicated when we have 5 or more ordered categories then it may be appropriate to consider those ordered categories as representing ordered intervals approximating “interval type data.” Therefore this researcher examined the data and decided to use ANOVA as the primary analysis and to compare that against the results from Kruskal Wallis for ordinal data.

The one-way ANOVA results are summarized in Table 6. The ANOVA analysis indicates there is a significant difference in the mean values for frequency of counselor data usage (F=11.71; df = 2/363; p = <.001). The results were similar when analyzing the data using
the Kruskal Wallis nonparametric test for ordinal data (Chi square = 21.01; df = 2; p <.001).

Regardless of whether the researcher examined differences in the means for the three groups with ANOVA or compared the medians of the three groups with Kruskal Wallis, the results were the same. The researcher subsequently used the Scheffe post hoc test in ANOVA to identify exactly where the groups differed. Those differences are identified in the notes to Table 6 and illustrated in Figure 4.1. The hypothesized results were not confirmed; however, the results indicate that the Non-RAMP Data Team Counselors reported using data more frequently than both the RAMP Data Team Counselors and also the No Data Team Counselors. These results demonstrated that the No Data Team Counselors and the RAMP Data Team Counselors did not differ significantly (p = .440) in the self-reported frequency of using data. There were significant differences in the frequency of data usage between the RAMP Data Team Counselors and Non-RAMP data team counselors (p = .003) and also between the No Data Team Counselors and the Non-RAMP Data Team Counselors (p = .001). When examining Figure 4.1 it is apparent that there is not a substantive difference in the means which is also reflected in a relatively small partial Eta squared value of .060. This indicates that approximately 6% of the difference in the means is accounted for which leaves 94% of the difference in the means attributable to other factors.

Table 6.

One-way ANOVA results for frequency of individual usage by group.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sums of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>84.75</td>
<td>2</td>
<td>42.37</td>
<td>11.71</td>
<td>&lt;.001</td>
<td>.060</td>
</tr>
<tr>
<td>Within</td>
<td>1313.38</td>
<td>363</td>
<td>3.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1398.13</td>
<td>365</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scheffe post hoc results: No data team (M = 4.63) vs. RAMP (M=4.67) p = .440
Non RAMP (M = 3.46) vs. RAMP (M = 4.67) p = .003
No data team (M = 4.63) vs. Non RAMP (M = 3.46) p = .001
Figure 4.1 Group means for frequency of counselors using data
Table 7

Summary descriptive statistics for data usage

<table>
<thead>
<tr>
<th>Variable by Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Range (Low – High)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Usage of Data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team School Counselors</td>
<td>43</td>
<td>4.63</td>
<td>2.19</td>
<td>1-8</td>
</tr>
<tr>
<td>RAMP Data Team Counselors</td>
<td>33</td>
<td>4.67</td>
<td>1.92</td>
<td>1-8</td>
</tr>
<tr>
<td>Non RAMP Data Team Counselors</td>
<td>290</td>
<td>3.46</td>
<td>1.86</td>
<td>1-8</td>
</tr>
<tr>
<td><strong>Love’s 4 Conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team School Counselors</td>
<td>35</td>
<td>3.81</td>
<td>1.63</td>
<td>1-7</td>
</tr>
<tr>
<td>RAMP Data Team Counselors</td>
<td>280</td>
<td>4.88</td>
<td>1.41</td>
<td>1-7</td>
</tr>
<tr>
<td>Non RAMP Data Team Counselors</td>
<td>25</td>
<td>4.94</td>
<td>1.43</td>
<td>2-7</td>
</tr>
<tr>
<td><strong>Facilitator Obstacle Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team School Counselors</td>
<td>35</td>
<td>3.20</td>
<td>1.40</td>
<td>1-7</td>
</tr>
<tr>
<td>RAMP Data Team Counselors</td>
<td>280</td>
<td>4.15</td>
<td>1.28</td>
<td>1-7</td>
</tr>
<tr>
<td>Non RAMP Data Team Counselors</td>
<td>25</td>
<td>4.38</td>
<td>1.41</td>
<td>1-6.67</td>
</tr>
</tbody>
</table>

**Individual usage of data response scale was:**
1=daily; 2=biweekly; 3=weekly; 4=bimonthly; 5=monthly; 6=biyearly; 7=yearly; 8=never

**Love’s 4 Conditions response scale was:**
1= strongly disagree to 7-strongly agree

**Facilitator-Obstacle Index response scale was:**
1=impedes my use of data to 7=facilitates my use of data

To explore the difference, frequency distribution of responses was done to look at the individual usage of the three counselor groups. The counselor participants’ self-reported frequency of data use is summarized by the three counselor groups (Table 8). Non-RAMP data team school counselors reported using data on a weekly basis (M=3.46, SD=1.86); whereas, RAMP data team school counselors and No Data Team Counselors reported using data on a monthly basis (M=4.67, SD=1.92; M=4.63, SD=2.19; respectively) (Table 7).
Table 8

Frequency distribution of responses for individual usage.

<table>
<thead>
<tr>
<th>How often do you individually use data?</th>
<th>No Data Team Counselors Number (%)</th>
<th>Non RAMP School Data team Counselors Number (%)</th>
<th>RAMP School Data Team Counselors Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Daily</td>
<td>7 (16.3)</td>
<td>65 (22.4)</td>
<td>3 (9.1)</td>
</tr>
<tr>
<td>2 = Biweekly</td>
<td>3 (7.0)</td>
<td>24 (8.3)</td>
<td>1 (3.0)</td>
</tr>
<tr>
<td>3 = Weekly</td>
<td>3 (7.0)</td>
<td>76 (26.2)</td>
<td>6 (18.2)</td>
</tr>
<tr>
<td>4 = Bimonthly</td>
<td>1 (2.3)</td>
<td>20 (6.9)</td>
<td>2 (6.1)</td>
</tr>
<tr>
<td>5 = Monthly</td>
<td>13 (30.2)</td>
<td>70 (24.1)</td>
<td>11 (33.3)</td>
</tr>
<tr>
<td>6 = Biyearly</td>
<td>6 (14.0)</td>
<td>14 (4.8)</td>
<td>4 (12.1)</td>
</tr>
<tr>
<td>7 = Yearly</td>
<td>8 (18.6)</td>
<td>20 (6.9)</td>
<td>4 (12.1)</td>
</tr>
<tr>
<td>8 = Never</td>
<td>2 (4.7)</td>
<td>1 (0.3)</td>
<td>2 (6.1)</td>
</tr>
</tbody>
</table>

Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean (SD)</th>
<th>Median</th>
<th>Low Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43</td>
<td>4.63 (2.19)</td>
<td>5.00</td>
<td>1.00</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>290</td>
<td>3.46 (1.86)</td>
<td>3.00</td>
<td>1.00</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>4.67 (1.92)</td>
<td>5.00</td>
<td>1.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

**Hypothesis 2.** RAMP counselors will have higher ratings on the Love’s 4 Conditions for data-based decision-making questions than the other two groups.

A Cronbach’s alpha was done on the five questions regarding Love’s 4 Conditions for data-based decision making to assess the internal consistency to determine if the correlation between these five questions was high so that they can reliably be combined and used as one variable. Since the Cronbach alpha was (α=.892) and a Cronbach alpha rating of .8 to .9 is good (Cronbach, 1951), these five questions were combined into a new variable called Love’s Summated Score. The mean for Love’s Summated Score was 4.78 (SD=1.47) on a Likert-scale of 1 (strongly disagree) to 7 (strongly agree) (see Table 9, Figure 4.2). When exploring the three groups on the variable of Love’s Index, the hypothesized results were partially confirmed. Both the RAMP and Non-RAMP Data Team Counselors had higher ratings on the Love’s Index
compared to the No Data Team Counselor. The ANOVA results indicate that statistically significant difference existed between the group No Data Team Counselor and the non-RAMP Data Team Counselor group (p=.001) and also between the No Data Team Counselor and the RAMP Data Team Counselor group (p=.003). (see Table 10). There was not a significant difference between the non-RAMP Data Team Counselor and the RAMP Data Team Counselor (p=.887).
Table 9

Summary information for Love’s Index by group.

<table>
<thead>
<tr>
<th>No Data Team Counselors</th>
<th>Non RAMP School Data Team Counselors</th>
<th>RAMP School Data Team Counselor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Cases</strong></td>
<td>35</td>
<td>272</td>
<td>33</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>3.81</td>
<td>4.88</td>
<td>5.01</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.63</td>
<td>4.88</td>
<td>1.42</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>4.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Low Value</strong></td>
<td>1.00</td>
<td>1.00</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>High Value</strong></td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
</tr>
</tbody>
</table>

Response scale: 1 = Strongly Disagree; 2 = Somewhat Disagree; 3 – Slightly Disagree; 4 = Neither Agree or Disagree; 5 = Slightly Agree; 6 = Somewhat Agree; 7 = Strongly Agree.

Table 10

One-way ANOVA results for Love’s Index by group.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sums of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>37.05</td>
<td>2</td>
<td>18.53</td>
<td>8.96</td>
<td>&lt;.001</td>
<td>.050</td>
</tr>
<tr>
<td>Within</td>
<td>696.68</td>
<td>337</td>
<td>2.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>733.736</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scheffe post hoc results: No data team (M = 3.81) vs. Non RAMP (M = 4.88) p = .001
No data team (M = 3.81) vs. RAMP (M=5.01) p = .003
Non-RAMP (M = 4.88) vs. RAMP (M = 5.01) p = .887
To explore these five questions more thoroughly, each question was individually assessed by each response scale (1 = strongly disagree to 7 = strongly agree). To try to determine which of Love’s conditions were rated the highest, the rating response scale values of 5, 6 & 7 were combined (slightly agree, somewhat agree & strongly agree). Mostly all three groups rated collaborative structures as their highest rating followed by collaborative cultures; easy access to useful data; timely access to useful data and wide-spread data literacy. For the collaborative structures item, nearly eighty percent of the Non-RAMP and RAMP Data Team Counselors (76.5%; 78.8%) rated this item with a 5, 6 or 7 compared to only 48.6% of the No Data Team Counselors. The combined score for the collaborative culture question was rated by Non-RAMP (68.0%); RAMP (75.6%) and No Data Team Counselors (48.6%). The combined score for the
easy access question was rated by Non-RAMP (63.6%); RAMP (63.7%) and No Data Team Counselors (37.2%). The combined score for the timely access question was rated by Non-RAMP (54.1%); RAMP (57.6%) and No Data Team Counselors (26.1%). The combined score for the wide-spread data literacy question was rated by Non-RAMP (58.8%); RAMP (48.4%) and No Data Team Counselors (31.4%). (see Table 11).

To try to determine which of Love’s conditions were rated the lowest, the rating response scale values 1, 2 & 3 were combined (slightly disagree, somewhat disagree & strongly disagree). Mostly all three groups rated wide-spread data literacy as their lowest rating followed by timely access; easy access; collaborative cultures and collaborative structures. The combined score for the wide-spread data literacy question was rated by Non-RAMP (30.3%); RAMP (25.4%) and No Data Team Counselors (57.2%). The combined score for the timely access question was rated by Non-RAMP (26.4%); RAMP (24.3%) and No Data Team Counselors (48.6%). The combined score for the easy access question was rated by Non-RAMP (22.9%); RAMP (21.3%) and No Data Team Counselors (48.5%). The combined score for the collaborative culture question was rated by Non-RAMP (18.8%); RAMP (18.2%) and No Data Team Counselors (37.1%). The combined score for the collaborative structures question was rated by Non-RAMP (12.9%); RAMP (6.0%) and No Data Team Counselors (42.8%). (see Table 11).
Table 11. Distribution of responses to Love’s condition index items by data team subgroup.

<table>
<thead>
<tr>
<th>Love’s Condition Item</th>
<th>1(^a)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Combine</th>
<th>Combine</th>
</tr>
</thead>
<tbody>
<tr>
<td>My school has:</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>a collaborative culture where staff members have shared norms and values that focus on collaboration.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team Counselor(^a)</td>
<td>11.4</td>
<td>11.4</td>
<td>14.3</td>
<td>14.3</td>
<td>8.6</td>
<td>20.0</td>
<td>20.0</td>
<td>37.1</td>
<td>48.6</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselor</td>
<td>5.9</td>
<td>5.9</td>
<td>7.0</td>
<td>13.6</td>
<td>23.9</td>
<td>25.0</td>
<td>19.1</td>
<td>18.8</td>
<td>68.0</td>
</tr>
<tr>
<td>RAMP Data Team Counselor</td>
<td>0.0</td>
<td>6.1</td>
<td>12.1</td>
<td>6.1</td>
<td>30.3</td>
<td>21.2</td>
<td>24.2</td>
<td>18.2</td>
<td>75.6</td>
</tr>
<tr>
<td>collaborative structures that facilitate meeting as teams to discuss data (i.e. study groups, grade level teams, school-based mathematics, reading and science leadership teams, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team Counselor(^a)</td>
<td>20.0</td>
<td>11.4</td>
<td>11.4</td>
<td>8.6</td>
<td>11.4</td>
<td>17.1</td>
<td>20.0</td>
<td>42.8</td>
<td>48.5</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselor</td>
<td>3.7</td>
<td>3.3</td>
<td>5.9</td>
<td>10.7</td>
<td>19.9</td>
<td>25.7</td>
<td>30.9</td>
<td>12.9</td>
<td>76.5</td>
</tr>
<tr>
<td>RAMP Data Team Counselor</td>
<td>3.0</td>
<td>3.0</td>
<td>0.0</td>
<td>15.2</td>
<td>21.2</td>
<td>15.2</td>
<td>42.4</td>
<td>6.0</td>
<td>78.8</td>
</tr>
<tr>
<td>wide-spread data literacy where staff have confidence and skills in understanding and interpreting data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team Counselor(^a)</td>
<td>25.7</td>
<td>22.9</td>
<td>8.6</td>
<td>11.4</td>
<td>5.7</td>
<td>11.4</td>
<td>14.3</td>
<td>57.2</td>
<td>31.4</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselor</td>
<td>7.0</td>
<td>6.3</td>
<td>12.1</td>
<td>15.8</td>
<td>22.8</td>
<td>23.5</td>
<td>12.5</td>
<td>25.4</td>
<td>58.8</td>
</tr>
<tr>
<td>RAMP Data Team Counselor</td>
<td>6.1</td>
<td>12.1</td>
<td>12.1</td>
<td>21.2</td>
<td>12.1</td>
<td>24.2</td>
<td>12.1</td>
<td>30.3</td>
<td>48.4</td>
</tr>
<tr>
<td>timely access to useful data (getting the data in time to respond to it)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team Counselor(^a)</td>
<td>14.3</td>
<td>20.0</td>
<td>14.3</td>
<td>25.7</td>
<td>8.6</td>
<td>14.3</td>
<td>2.9</td>
<td>48.6</td>
<td>26.1</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselor</td>
<td>5.1</td>
<td>7.7</td>
<td>13.6</td>
<td>19.5</td>
<td>19.9</td>
<td>21.7</td>
<td>12.5</td>
<td>26.4</td>
<td>54.1</td>
</tr>
<tr>
<td>RAMP Data Team Counselor</td>
<td>3.0</td>
<td>6.1</td>
<td>15.2</td>
<td>18.2</td>
<td>9.1</td>
<td>30.3</td>
<td>18.2</td>
<td>24.3</td>
<td>57.6</td>
</tr>
<tr>
<td>easy access to useful data (not some place behind lock and key.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Data Team Counselor(^a)</td>
<td>17.1</td>
<td>14.3</td>
<td>17.1</td>
<td>14.3</td>
<td>11.4</td>
<td>22.9</td>
<td>2.9</td>
<td>48.5</td>
<td>37.2</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselor</td>
<td>6.3</td>
<td>7.0</td>
<td>9.6</td>
<td>13.6</td>
<td>21.3</td>
<td>22.1</td>
<td>20.2</td>
<td>22.9</td>
<td>63.6</td>
</tr>
<tr>
<td>RAMP Data Team Counselor</td>
<td>9.1</td>
<td>6.1</td>
<td>6.1</td>
<td>15.2</td>
<td>15.2</td>
<td>27.3</td>
<td>21.2</td>
<td>21.3</td>
<td>63.7</td>
</tr>
</tbody>
</table>

\(^a\) Number of cases: No Data Team Counselors (43); Non-RAMP Data Team Counselors (290); and RAMP Data Team Counselors (33).

\(^b\) Response scale: 1 = Strongly disagree; 2 = Somewhat disagree; 3 = Slightly disagree; 4 = Nether agree or disagree; 5 = Slightly agree; 6 = Somewhat agree; and 7 = Strongly agree.
**Hypotheses 3 & 4.** RAMP counselors will have lower rating for the obstacles and higher ratings for the facilitators to data-based decision-making than the other two groups.

A Cronbach’s alpha was completed on the six questions regarding facilitators and obstacles to access the internal consistency to determine if the correlation between these six questions was high so that they can reliably be combined and used as one variable. Because the Cronbach alpha was ($\alpha=.827$) and a Cronbach alpha rating of .8 to .9 is good (Cronbach, 1951), these six questions were combined into a new variable called the Facilitator-Obstacle Index. The mean for Facilitator-Obstacle Index was 4.06 (SD=1.33) on a Likert-scale of 1 (impedes my use of data) to 7 (facilitates my use of data) (see Table 12). When exploring the three groups on the variable of the Facilitator-Obstacle Index, the hypothesized results were partially confirmed. Both the RAMP and Non-RAMP Data Team Counselors had higher facilitative ratings and lower ratings on the impeding obstacles compared to the No Data Team Counselor. The ANOVA results indicate that statistically significant difference ($p=.000$) existed between the No Data Team Counselor group and the RAMP Data Team Counselor group and also between the No Data Team Counselor group and the Non-RAMP Data Team Counselor group (see Table 13).
Table 12

Descriptive Statistics for Facilitator-Obstacle Index

<table>
<thead>
<tr>
<th>FACILITATOR-OBSTACLE_INDEX</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>95% Confidence Interval for Mean</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper Bound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.00 NO DATA GROUP</td>
<td>35</td>
<td>3.20</td>
<td>1.40366</td>
<td>2.7178</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>1.00 NON RAMP GROUP</td>
<td>280</td>
<td>4.15</td>
<td>1.28144</td>
<td>3.9993</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>2.00 RAMP GROUP</td>
<td>25</td>
<td>4.38</td>
<td>1.41872</td>
<td>3.7944</td>
<td>1.00</td>
<td>6.67</td>
</tr>
<tr>
<td>Total</td>
<td>340</td>
<td>4.06</td>
<td>1.33495</td>
<td>3.9267</td>
<td>1.00</td>
<td>7.00</td>
</tr>
</tbody>
</table>

Table 13

ANOVA by Facilitator-Obstacle Index

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Data Team Counselors</td>
<td>38.066</td>
<td>124</td>
<td>.307</td>
<td>1.834</td>
<td>.000</td>
</tr>
<tr>
<td>RAMP Data Team Counselors</td>
<td>502.710</td>
<td>124</td>
<td>4.054</td>
<td>1.105</td>
<td>.260</td>
</tr>
<tr>
<td>Non-RAMP Data Team Counselors</td>
<td>30.686</td>
<td>2</td>
<td>15.343</td>
<td>9.017</td>
<td>.000</td>
</tr>
</tbody>
</table>
Chapter 5

Discussion

This chapter includes a summary of the study’s procedures, the findings of the research, its limitations, implications for practice, and suggestions for future research. The purpose of this study was to examine the beliefs and practices of school counselors on their data usage.

Study Summary

Data from 406 school counselors were gathered from the ASCA member directory. The independent variables in this study were the team membership of the counselor (RAMP data team counselor, non-RAMP data team counselor and no data team counselor). The dependent variables were individual data usage, data team usage, Facilitator-obstacle Index and Love’s Summated Score. For the purpose of data analysis, the dependent variables Facilitator-obstacle Index ($\alpha=.827$) and Love’s Summated Score ($\alpha=.892$) were used after a Cronbach’s alpha was conducted to determine if those six and five questions respectively could be reliably combined and used as their own variable.

13 Statements of How Do School Counselors Use Data?

There were 13 statements that were used from the Young and Kaffenberger (2011) survey of school counselors’ use of data. The subscale ($\alpha=.926$) of 13 statements assessed counselors’ beliefs and practices of their data usage. Descriptive statistics suggest that school counselors in this survey reported neutral data usage ($M=4.47$ – neither agree or disagree to slightly agree) in their school counseling programs. The “neutral” data usage appear to suggest that perhaps there is a slight increase in counselors use of data compared to the low data usage result found by Holcomb-McCoy, et al. (2009). These results differed from the Young and Kaffenberger (2011) study which surveyed only RAMP school counselors. The Young and
Kaffenberger RAMP school counselors reported higher data usage (M=6.15 – somewhat agree to strongly agree).

When those same 13 statements looked at the percent of school counselors with a combined score on the “Agree” or “Strongly Agree” rating, the participants in the current study had much lower scores than the Young and Kaffenberger RAMP school counselor scores. An average of twenty-nine percent of the participants in this study answered “Agree” or “Strongly Agree” on these thirteen questions compared to seventy-nine percent of the RAMP counselors in the Young and Kaffenberger study. When the range of these thirteen questions where participants in this study answered “Agree” or “Strongly Agree” was explored, both this study (13.8%) and the Young and Kaffenberger study (42.1%) had “I use data to evaluate student enrollment patterns” as the lowest rated question. The highest rated question out of these thirteen items was also the same question for this study (42.1%) and the Young and Kaffenberger study (92.1%) “I analyze the data I collect”.

Although a statistical comparison between the two studies cannot be made, the findings of this study appear to support the Young and Kaffenberger’s findings that RAMP could provide incentive for school counselors’ use of data because RAMP Data Team Counselors scored higher on the Facilitator-Obstacle Index and also on Love’s 4 Conditions Index. Non-RAMP Data Team Counselors also scored higher on the Facilitator-Obstacle Index and also Love’s 4 Conditions Index. This supports ASCA’s encouragement of RAMP for school counseling programs. The results from this study also support encouragement of Non-RAMP data teams because Non-RAMP Data Team Counselors scored higher on their frequency of data usage over the No Data Team Counselors and the RAMP Data Team Counselors. If the Young and Kaffenberger (2011) and this study reported higher usage of data than No Data Team
Counselors, it could encourage school counselors to follow the ASCA National Model and hopefully to apply for RAMP to increase that they are implementing a comprehensive, data-driven school counseling program. It could also encourage school counselors to be part of data teams within their schools to work collaboratively using data to help students be successful.

The neutral data usage rate found in this study highlights the discrepancy between national mandates and organizational recommendations. It might be encouraging that counselors’ data usage in general might not be as low as it has been previously reported. A series of ANOVAS were used to examine the dependent variables (individual counselor usage, data team usage, Love’s 4 Conditions and Facilitator-Obstacle Index) and also the three counselor groups: RAMP Data Team Counselor, non-RAMP Data Team Counselor and No Data Team Counselor group to determine if there is a difference between the groups on the previously mentioned dependent variables.

**How Are School Counselors Trained to Use Data?**

Results of this study indicate that school counselors think that they are trained “fairly well” in graduate school, professional development trainings, and state/national conferences (M=3.02, 2.67, 2.81 respectively). However, nearly half reported that they had “very little” to “no training” from all three areas mentioned above (43.8%, 49.1%, 41.9% respectively) and very few school counselors reported their training in all three levels as “very well” to “extremely well” (18.3%, 12.5%, 12.5% respectively). This is consistent with Blacher et al. (2005) findings that “no training received an “excellent” rating” (p. 341). Poynton (2009) stated “no known studies to date have been published that evaluate the effect of professional development to increase school counselors’ data use” (p. 43). The quantitative data in his study showed that the professional development alone did not increase counselors’ use of data. Poynton states that the
 qualitative data in his study “lend support to (Love’s) conceptualization of the requisite knowledge, skills, and attributes of the school culture to facilitate actual data use and data-driven decision making” (p. 44). Perhaps if school counselors, administrators, counselor educators and ASCA focus on trainings to increase Love’s 4 Conditions of Data-based Decision Making, then school counselors will rate their trainings on the use of data more favorably and more importantly implement that training and increase their data usage.

**Individual Usage**

It was interesting to explore the “individual usage” to see how often the sample reported using data, and also to determine if there was a difference among the groups in how much they use data. The mean “individual usage” score for the entire sample represents bimonthly to weekly usage of data. That is reassuring that counselors in this survey reported that they were using data almost on a weekly basis. Love et al., 2010 suggests that school administrators should ideally provide 45 minutes/week for data teams to meet. Statistically significant results were found between the group No Data Team Counselor and the non-RAMP Data Team Counselor group (p=.001) and also between the No Data Team Counselor and the RAMP Data Team Counselor group (p=.003). There was no significant difference in the frequency of data usage between the No Data Team Counselor and the RAMP Data Team Counselor (p=.440). This showed that No Data Team Counselors and RAMP Data Team Counselors did not use data as frequently as non-RAMP Data Team Counselors. This might suggest the importance of a counselor being part of a data team might be more important than RAMP. ASCA strongly encourages school counselors to be included on data teams. If counselors are not part of a data team, it appears that they do not use data as frequently as counselors that are part of a data team even if they have achieved RAMP status. Since there was a significant difference between the RAMP Data Team
Counselors and the non-RAMP Data Team Counselors, this could show that even if you are a RAMP school counselor it is important to be part of a data team. This could start to show support for Love’s 4 Conditions for Data-Based Decision-Making.

**Love’s 4 Conditions for DBDM**

Love’s 4 Conditions for Data-Based Decision-Making (DBDM) suggests that there are four critical conditions that are necessary for effective data-based decision making in schools: collaborative culture, collaborative structures, widespread data-literacy, and access to useful data. The results of this study found a significant difference between the No Data Team Counselors and the RAMP Data Team Counselors ($p=.003$) and the No Data Team Counselors and the Non-RAMP Data Team Counselors ($p=.001$). The RAMP Data Team Counselors and the Non-RAMP Data Team Counselors had higher scores on Love’s 4 Conditions than the No Data Team Counselors and there was no significant difference between these first two groups ($p=.887$). This could suggest support for Love’s 4 Conditions. Figure 5.1 below lends a visual description as to why the Non-RAMP group might be bit more significant than the RAMP and No Data Team Groups.
<table>
<thead>
<tr>
<th>Love’s 4 Conditions</th>
<th>RAMP</th>
<th>Non-RAMP (i.e. PBIS, OBPP)</th>
<th>No Data Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collaborative Culture</td>
<td>Advisory Council</td>
<td>A rep. from every grade level, special areas, principal &amp; counselor</td>
<td>Nothing/Not defined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Collaborative Structure</td>
<td>Meets twice/year</td>
<td>Team/School-wide: Bi-weekly/Monthly</td>
<td>Nothing/Not defined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Wide-spread data literacy</td>
<td>Nothing/Not defined</td>
<td>School-wide</td>
<td>Nothing/Not defined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Access to useful data</td>
<td>Nothing/Not defined</td>
<td>Team/School-wide (i.e. PBIS-SWIS, edInsight)</td>
<td>Nothing/Not defined</td>
</tr>
</tbody>
</table>

*Figure 5.1 Applying RAMP, Non-RAMP and No Data Team Counselor Groups to Love’s 4 Conditions for Data-based Decision Making (2002, 2004)*

When applying RAMP, Non-RAMP and No Data Team Counselor Groups to Love’s 4 Conditions for Data-based Decision Making (2002, 2004), there are several factors that seem different and could be influencing data usage. Both the RAMP and No Data Team Counselors’ groups seem to be lacking on Love’s 4 Conditions for DBDM compared to some Non-RAMP Data Teams. RAMP’s Advisory Council (Collaborative Culture) only meets twice a year as opposed to some Non-RAMP Data Teams (i.e. PBIS, OBPP) that meet 1-2 times per month (Collaborative Structure). Non-RAMP Data Teams also seem to also have a better representation (Collaborative Culture) on their team (a representative from every grade level,
special areas, principal, parents and counselor) to analyze their school’s data (see http://www.pbis.org/school/primary-level/faqs). RAMP does suggest a “broader representation” for the Advisory Council (ASCA National Model, 2012);, but the focus is on program goals so representation is not necessarily at the building level (i.e. school board members, and business and community members). The Non-RAMP Data Teams place greater emphasis on side-spread data literacy within the building. The Non-RAMP Data Teams tend to have more access to useful data because of programs like PBIS-SWIS and edInsight. Having more access to useful data can also increase the wide-spread data literacy because more people can access the data. That can possibly increase the data literacy among more all staff members.

Exploring Love’s 4 Conditions independently, mostly all three groups rated collaborative structures as their highest rating followed by collaborative cultures; easy access to useful data; timely access to useful data and wide-spread data literacy. RAMP and Non-RAMP Data Team Counselors were higher than No Data Team Counselors on all five questions. RAMP was slightly higher than Non-RAMP Data Team Counselors on all of the questions except for wide-spread data literacy.

**Collaborative culture.** The collaborative structures and collaborative culture items were fairly similar in response. The combined score for the collaborative culture question was rated by Non-RAMP (68.0%); RAMP (75.6%) and No Data Team Counselors (48.6%). The results of this study supports Love’s (2004) statement that “structures have to rest on the foundation of culture” p. 3. Using data is a component of RAMP (ASCA, 2012) and non-RAMP Data Team Counselors (PBIS & OBPP). Perhaps RAMP and non-RAMP Data Team Counselors have the collaborative culture where everyone values using data. If counselors are part of data teams then that collaborative culture could almost expect counselors to use data to drive what they do such
as which classrooms or grade levels might need classroom lessons; what students are in most need for a Tier 2 or 3 interventions and what intervention would best meet their need. The collaborative culture helps the counselor work within a data team to best meet the needs of their students.

**Collaborative structures.** The combined score for the collaborative structures question was rated at nearly eighty percent by the Non-RAMP and RAMP Data Team Counselors (76.5%; 78.8%) compared to only 48.6% of the No Data Team Counselors. Collaborative structures are set up so that regular meetings are scheduled to ensure that time is set aside to look at data as a team. Collaborative structures could help school counselors because time is set aside for data teams to meet instead of a school counselor trying to track down teachers to put interventions into place. Widespread data-literacy helps school counselors to not be left in the dark. They work within data teams to understand the different data such as achievement data like academic assessments and report cards and behavioral data like discipline referrals, suspensions, attendance and homework completion.

**Wide-spread data literacy.** The combined score for the wide-spread data literacy question was rated by Non-RAMP (58.8%); RAMP (48.4%) and No Data Team Counselors (31.4%). This was the only question that non-RAMP Data Team Counselors rated higher than the RAMP Data Team Counselors. This could be because RAMP does not focus on the entire school using data compared to other programs like PBIS and Olweus which have data teams that share their data with everyone in the building at least monthly. Widespread data-literacy is easier when you have a collaborative culture where data is shared and valued. It allows for questions to be asked of other team members if they have questions about the data. Then as teams, they problem solve to put interventions in place to help students be more successful.
Timely and easy access to data. The next highest rating was easy access to data. The combined score for the easy access question was rated by Non-RAMP (63.6%); RAMP (63.7%) and No Data Team Counselors (37.2%). The combined score for the timely access question was rated by Non-RAMP (54.1%); RAMP (57.6%) and No Data Team Counselors (26.1%). Data teams can also yield support for Love’s 4 Conditions because it gives access to useful data. The data are usually at the team meetings instead of the counselor having to go to a person or a file cabinet to try to retrieve the data. Many data are accessible via internet-based data systems (like PBIS-SWIS; PBIS-CICO; PBIS-ISIS; DIBELS (Dynamic Indicators of Basic Early Literacy Skills). There are also database warehouse programs like edInsight that compile all data (such as attendance, discipline, curriculum based assessments, report cards, etc.) in one internet-based location. EdInsight helps to align curriculum and interventions. Educators can “spend time analyzing results as they arrive, not organizing data. EdInsight pulls in new data as it arrives. It instantly links new data to old, and provides interpretation in your own customizable data dashboard. No jumping from one software package to another. No more matching Student IDs over 3 or more paper printouts. Instead you develop and execute on instructional strategies.” (for more information see http://www.onhandschools.com/index.php/products). Love’s 4 Conditions assist counselors and schools to use data to meet the needs of their students by working collaboratively in regularly scheduled meetings with access to timely and useful data. “If you want to lift ten pounds, you can do it yourself, if you want to lift two-hundred pounds, you’d better have a team.” (Love at al., 2010, 45).

Facilitators and Obstacles

Research suggests the importance of facilitators and obstacles to the use of data (Blacher, et al., 2005; Poynton, 2009; Young & Kaffenberger, 2011). The results of this study found that
the No Data Team Counselors were significantly lower than the RAMP Data Team Counselors and also the non-RAMP Data Team Counselors on the Facilitator-Obstacle Index variable. This could suggest that the importance of teams might increase the facilitators and decrease the obstacles. These six questions focused on time, importance, data skills, access to data, data use culture, and availability to data teams. If you are on a data team, then usually there is a culture that data is important and access is easy to that data. The ASCA National Model (2003, p. 190) clearly states school counselors should “maximize collaborative teaming to ensure individual student success.” Time is then usually made to explore data. PBIS suggests using data on a “regular basis (every two weeks) to monitor key indicators, and identify problems before they become difficult.” (https://www.pbis.org/common/cms/files/.../rhdata...data mining0907iowa.ppt). PBIS uses a web-based information system (SWIS-School-Wide Information System) for staff to use to explore office referral data to implement school-wide and individual student interventions. Programs like PBIS and RAMP seem to have factors that help to increase the facilitators and decrease the obstacles that counselors tend to have with time, importance, data skills, access to data, data use culture, and availability to data teams

**Facilitators.** Holcomb-McCoy et al. (2009) found that self-efficacy beliefs had a significant impact on counselor usage. Young and Kaffenberger (2011) expand upon Holcomb-McCoy’s thoughts by saying that the RAMP school counselors in their study might have higher self-efficacy because they were reinforced when they saw the power of data by going through the RAMP process. Results from this study and others seem to suggest that the RAMP process (and other non-RAMP data teams like PBIS) facilitates Love’s 4 Conditions for DBDM (Holcomb-McCoy et al. & Poynton, 2009). Perhaps that collaborative culture, collaborative structure, wide-spread data literacy and access to useful data affect counselors’ self-efficacy and
disposition towards data usage. Results from this study found that RAMP and Non-RAMP Data Counselors were significantly higher on Love’s 4 Conditions compared to the No Data Group Counselors. Perhaps the simple expectation and accountability that comes with RAMP and Non-RAMP Data Teams encourages or almost expects counselors to use data. Merriam-Webster defines disposition as a tendency to act or think in a particular way. When a counselor is part of a RAMP or non-RAMP data team, they have a tendency to follow Love’s 4 Conditions and tend to have a higher usage of data; thereby, possibly having more of a disposition towards data usage.

The highest facilitative rating found in this study were data skills (31.3%), importance of data (30.5%) and access to data (30.3%). These six facilitator-obstacle questions were rated on a Likert scale from 1 (impedes my use of data) to 7 (facilitates my use of data). Therefore; approximately one-third of the respondents thought that data skills, importance of data and access to data were more of a facilitator to their data usage than an obstacle. The results in the Poynton (2009) study were fairly similar with the top facilitators in that study being technology, access, knowledge and relevance. This could be reassuring that there is possibly beginning to show a trend that counselors are seeing data as important, having better skills and access to data. Perhaps when counselors are part of RAMP and non-RAMP data teams, they obtain the skills through the team and/or associated training/process. They also tend to have better access necessary to explore data and they understand the importance of data in their counseling program.

**Data skills.** The strongest facilitative factor reported was if counselors believe that they have data skills (31.3%). In this study; however, training in isolation alone does not increase the use of data by school counselors (ASCA, 2005; Education Trust, 1999; Poynton, 2009; Young &
Kaffenger, 2011). In fact, Poynton (2009) highlighted that his professional development workshops did not yield the greatest usage of data. Poynton’s group with the greatest data usage were the counselors that were part of a data team and not the counselors that received more of his professional development training on data usage. This could support Love’s 4 Conditions since wide-spread data literacy is one of the four conditions. Love stated the most important condition is collaborative culture (Love, 2004). Perhaps that is why data skills was the strongest facilitator in this study but with only about one-third of the participants. This result still indicates that school counselors do not rate themselves as having a high level of data skills. That could be because “data use culture” was one of the lowest ratings. This could be reinforcing to Poynton’s findings and Love’s statement that culture is more important than skills.

**Importance of data.** The next greatest facilitator reported of data usage was the importance of data (30.5%). School counselors still have low usage of data (Blacher et al., 2005; Holcomb-McCoy, et al., 2009; Poynton, 2009; Young & Kaffenger, 2011). Therefore, it needs to be important in order for counselors to want to use it. Again, when counselors are part of data teams that could help to place the importance of data usage. Then the progress monitoring of that data helps to continue to place the importance when counselors can see results from using that data (Young & Kaffenger, 2011). ASCA highlights this by stressing that school counselors should “maximize collaborative teaming to ensure individual student success.” (ASCA, 2003, p. 190).

**Access to data.** Access to data was also an important facilitator of data usage (30.3%). If counselors have easy access to data, it makes it easier and more likely for them to use data. When counselors are part of data teams, the data comes to them via the data team whereby, it could increase their data usage. Some data teams have access via programs like PBIS-SWIS,
edInsight, PowerSchool or other data warehouse programs that make access to data even more accessible. They are able to pull data from those internet-based programs instead of having to pull it from a file cabinet. Therefore, data can be accessed during team meetings, parent-teacher conferences, etc. and shared with other staff, parents, health care providers, and most importantly the student themselves.

**Obstacles.** The greatest obstacles to data usage were time (47.9%), availability to data team (28.8%) and data culture (21.2%). The top three obstacles in the Poynton (2009) study were time, knowledge and data focus (what data should I use).

**Not enough time.** If counselors have heavy caseloads and other duties/tasks demanding their time, it appears that is an obstacle to counselors attempting to use data. Time was the number one obstacle reported by almost half of the participants in this study. Time was also the number one obstacle reported in Poynton’s study (2009). In this study, the mean of the student caseloads was 491. ASCA recommends a 250-to-1 ratio of students to school counselors. There were 303 respondents that were above the 250:1 that is recommended by ASCA. If the average respondent has nearly twice as many students on their caseload than what is recommended by ASCA, those higher numbers could contribute to the school counselors responding that they do not have enough time. If they are part of a data team; however, then the time is already set aside for them. So even if school counselors have higher caseloads, if they are part of a data team, then time would be set aside to explore that data on a regular basis and it could possibly lessen the burden of a heavy caseload.

**Availability to data team.** The availability to data teams was another obstacle to data usage reported in this study. Nearly one-third of counselors in this study reported that availability to data teams is an obstacle to their data usage. If counselors are not part of data teams or worse yet
if they are excluded from data teams as suggested by Dahir and Stone (2003), this is an obstacle. Some administrators do not think that counselors need to be part of data teams and therefore do not ask (or even prohibit) counselors from being on data teams (Blacher et al., 2005). Programs like PBIS, Olweus Bully Prevention Program, and RAMP validate the importance of data teams to include a representative from each grade level, special areas (like art, music, and physical education), special education, the building principal and the counselor. It is this well-rounded data team that can collectively work together to bring about change and success for their students. (ASCA, 2012, Olweus Bully Prevention, 2016, & PBIS, 2014).

Data culture. Data culture was another obstacle to data usage among counselors (21.2%). If the school culture does not value the use of data, this appears to be an obstacle for counselors. Love (2004) argues that data culture is more important than data structures. “Structures have to rest on the foundation of culture, because if we create structures without culture, then folks come together and talk about matters that aren’t at the center of teaching and learning, like discipline or hats in school or chewing gum.” (p. 3). Therefore, it seems imperative that schools create a data culture where all (including counselors) value data.

Training. Now that we have explored the facilitators and obstacles, training is important to explore. Respondent answers regarding their training in this study were similar to the results found by Young and Kaffenberger in regards to what percentage of counselors in these studies felt that they received training on data usage in graduate school (48.6%; 54%) and training at state/national conferences (46.4%; 39%) respectively. However, the results regarding training at district professional development were not as close (54.4%; 74%). Again, the two studies cannot be compared but it seems as though the higher level of training at district professional development level for the RAMP counselors in the Young and Kaffenberger study could be a
result of the RAMP process. After all, the RAMP process involves an advisory council that meets to review program results and advise on program goals. The RAMP school then uses data to drive their counseling program (ASCA, 2012). Perhaps that higher level of commitment from the district level, also supports Love’s 4 Conditions because the district creates a collaborative culture with collaborative structures such as scheduled meetings as data teams with wide-spread data literacy and access to useful data. Although training is important, focus on Love’s 4 Conditions seem to be more important. Poynton (2009) found in his study that the Data Team Counselors used data more than the counselors that received more of his professional development training on the use of data. Holcomb-McCoy, et al. (2009) found that frequency of professional development had no influence on data usage. Therefore, perhaps training should focus on which of Love’s 4 Conditions a school/counselor is lacking. If a concerted effort is put on the area of weakness (collaborative culture, collaborative structure, wide-spread data literacy and access to useful data), that might be the best areas to focus professional development training. For example, if a school has collaborative structures (scheduled meetings every morning before school), but they only have access to data if the principal (or other data person) is in attendance, then that school might want to focus their efforts and/or trainings on access to data so that they have timely access to useful data. If a school has collaborative structures (scheduled meetings every morning before school) and access to useful data but all they do is sit around and complain about discipline or hats in school, then they might want to focus trainings on the collaborative culture. A collaborative culture is where all team members share the same values about working together using data to focus on student learning using reflective dialogue (Love, 2004).
Counselors have many duties and responsibilities. Using data can feel burdensome and overwhelming with all of the other responsibilities that counselors have. Once counselors truly understand how to use data, they realize that it helps them to work smarter and be more effective with their time (Young & Kaffenberger, 2011). Administrators and supervisors can support these endeavors by lessening duties and other tasks so that counselors have the time and energy to focus on data (ASCA, 2012, p. 45). Administrators, supervisors, and counselor educators can offer quality, hands-on training that can transfer into the work place and hopefully increase the knowledge and skills of data usage for counselors. (Holcomb-McCoy et al., 2009; Murphy & Kaffenberger, 2009; Rowell, 2006; Young & Kaffenberger, 2012)

Limitations

This study has several limitations. As with most self-respondent data, social desirability is a threat to validity. Caution should be taken when applying self-report data to school counselors. Caution should also be used when applying these results with school counselors across the United States. The results cannot be generalized to school counselors who are not members of ASCA. Another limitation is that ASCA membership could bias the responses. The counselors in this study were members of ASCA. That could possibly bias the results because if they are members of ASCA they might be more likely than counselors at large to follow the ASCA National Model like RAMP counselors. Results also cannot be generalized to the individuals who did not respond to the survey.

Strengths

This study presents an important contribution to the current body of counseling literature. This research continues the work of Young and Kaffenberger (2011) by adding to what we know about facilitators and obstacles. It extends the Young and Kaffenberger study by comparing
participant responses on data usage with RAMP Data Team Counselors, non-RAMP Data Team Counselors and No Data Team Counselors from a large sample involving numerous states. It is the first study to explore Love’s 4 Conditions to see if they might influence data usage.

Another strength is that the researcher is currently a practicing school counselor who uses data and advocates for the use of data. Through personal experience, the use of data has been an evolving process. Programs like Olweus Bully Prevention Program, PBIS, and RtII have facilitated greater data usage. Data warehouse programs like PBIS-SWIS and edInsight have made data usage easier and more viable.

**Future Research**

Future research might investigate outcomes between RAMP data team counselors, non-RAMP Data Team Counselors and no Data Team Counselors by utilizing a national sample of experimental and control groups to determine if there is a difference in data usage and also to see if there is a difference student achievement. The frequency of data usage is important but the outcomes (e.g. increased academic achievement, increased attendance, decreased behavior referrals) as a result of counselors using data is of more importance. It might be useful to find schools with relatively similar demographics (i.e. number of students, SES levels, diversity, etc) that have fully implemented RAMP, fully implemented another evidence-based DBDM program like PBIS and no data team schools. Then the study could be replicated to see if there was a difference in the data usage among those three different groups. Even more important would be to explore if there was a difference in their student achievement (English/Language Arts: ELA and Math state achievement tests). To date, only one study has been found that compares RAMP vs. non-RAMP schools using a control group (Wilkerson, et al., 2013). Significantly higher
results were found on the ELA and Math state achievement tests for RAMP schools over their control schools; however, it was limited only to the state of Indiana and had a small sample size.

Longitudinal studies would be beneficial to determine whether RAMP school counselors continue their data usage over time. Since RAMP has existed for approximately ten years, it would be beneficial to see if RAMP schools continue to have the same or increased use of data. It would be beneficial to monitor achievement before RAMP, after RAMP and several years after RAMP to see if there is a difference in academic achievement. It was suggested by Wilkerson et al. (2013) to extend the evaluation of school-wide achievement several years prior and several years after RAMP designation for a more longitudinal view than their four year comparison. There could be initiatives in the year or two before applying for RAMP designation that would already be creating positive outcomes.

Studies exploring the effectiveness of Love’s 4 Conditions could be beneficial. To date, no research could be found about Love’s 4 Conditions. Future studies could examine if there is a positive relation between schools that are high on Love’s 4 Conditions and an increase in student achievement.

If Love’s 4 Conditions would yield positive student outcomes, then research exploring each of the 4 Conditions and ways to increase each of the 4 Conditions could be beneficial. There has been a lot written about the importance of data for school counselors (ASCA, 2012; Dimmit, 2009; Gysbers, 2010; Young & Kaffenberger, 2009). There is very little research that has found what conditions are most important. Studies have explored counselor dispositions (Holcomb-McCoy, et al., 2009) and training (Blacher, et al., 2005; Poynton, 2009) but nothing has been able to break down what conditions assist to yield positive student outcomes. In fact, Blacher, et al. (2005) and Poynton (2009) found that training did not have a positive effect on
data usage. Poynton actually found counselors that received less of his training had higher data usage. He stated that “factors outside of the professional development workshop can strongly influence results” (p. 43). Poynton found the group that implemented the ASCA National Model and were required to complete a “data project” had higher data usage over his group that received more professional development training on data usage. This could suggest that collaborative culture is more important than training. Love (2004) specifically points out that the collaborative structures “have to rest on the foundation of culture” (p.3). Although Holcomb-McCoy et al. (2009) state a significant link with counselor self-efficacy and data usage, Young & Kaffenberger (2011) suggest that perhaps school counselors’ self-efficacy is “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” (p. 73). This could suggest a possible collaborative culture is created in RAMP and other school-wide data programs like PBIS. Further research would be important to see if collaborative cultures are more important than collaborative structures, widespread data literacy and access to useful data.

Research investigating professional development paradigms that improve data usage among school counselors/educators could be beneficial. Several researchers suggests other alternatives to professional development from the traditional workshop-type format such as “peer coaching”, pairing counselor educators with school counselors, data training in which school counselors use their data to personally experience the power that data can provide and regular opportunities for collaboration and reflection with colleagues to discuss how to use data (Blacher et al., 2005; Holcomb-McCoy et al., 2009; Joyce & Showers, 1996; Poynton (2009). Perhaps a more hands-on focus to professional development like mentioned above would yield better results and it could possibly increase the collaborative culture within that school/district.
A more specific tool to assess facilitators and obstacles to data use in schools could help to narrow the focus of what needs to be fixed in order to increase data usage. Just like with students, data are needed to determine where weaknesses are before interventions are put into place; otherwise, counselor educators and school administrators could be wasting time and money on training and professional development in areas that are not helpful to the process of increasing data usage.

Further study about how counselor education programs are preparing counselors-in-training would be beneficial. Nearly half of the respondents in this study reported that they receive little to no training of data usage in graduate school. Studies exploring the different types of trainings provided during graduate school and the perceived impact on counselors’ data usage could be beneficial.

Implications for School Counseling Professionals

Professional School Counselors. The literature suggests the importance of using data could improve comprehensive school counseling programs (Lapan et al., 2006; Lapan et al., 2001; Sink & Stroh, 2003; Whiston & Quinby, 2009). Three recommendations seem appropriate for school counselors based on this study and others (Holcomb-McCoy et al., 2009; Poynton, 2009; Young & Kaffengerber, 2011). First, school counselors are encouraged to implement comprehensive school counseling programs as outlined by ASCA (2005). It appears in this research and other research that school counselors are still not using data in high rates as suggested (Dimmit, 2009; Holcomb-McCoy, 2007; Young & Kaffenberger, 2011). Herr’s questions in 2001 are still an important questions in 2016, “Are we training counselors in the most effective ways to use assessments, and to understand the roles of assessment as interventions and as integral to counseling processes?” and “Have we identified effective training models in counselor use of
assessments and the competencies necessary to use different types of tests in counseling practice? Are we providing sufficient opportunities for retraining of counselors whose skills and understanding of assessment may be outdated?” (p. 23).

Second, this study suggests that there is a low number of school counselors who are actually using data in their programs despite the research. The RAMP counselors in the Young & Kaffenberger study (2011) found 82.5% of their respondents answered “agree” or “strongly agree” that they are using data to make program decisions compared to only 24.1% in this study. This appears low; however, it appears that it might be possibly increasing. Based on previous research, Holcomb-McCoy et al. (2009) reported the counselors in their study used data “rarely” to “some of the time”. The descriptors in this study attempted to be more concrete “daily, biweekly, weekly, monthly, etc” by giving a more specific amount of time as opposed to the general descriptors of “rarely”, “some; most or all of the time” in the Holcomb-McCoy study. Not that the two studies can be compared, but the mean score results in this study reflect an almost “weekly” usage as opposed to Holcomb-McCoy’s results of a mean score of “rarely” to “some of the time”. It is recommended for school counselors to reflect upon how much they use data in their daily counseling programs to help meet the needs of their students. Love (2012) recommends 45 minutes per week for teams to meet using data. Upon reflection, if school counselors are not using data at least weekly, it is recommended for them to examine what they can do to increase their use of data.

Third, school counselors are encouraged to analyze which obstacles could be limiting/preventing their usage of data. Once the obstacles are known, then school counselors can put plans in place to increase their opportunity of using data (i.e. obtain further training, ask to be members of data teams, and discuss competing duties with administrators that could be
taxing the counselor’s time, etc). The profession of a school counselor is a busy one. The use of data can streamline program initiatives so that counselors do not have to waste their limited amount of time (ASCA, 2012).

**Counselor Educators/School Administrators.** Because lack of trainings and/or ineffective trainings are a possible limiting factor for counselors’ data usage, it is recommended that counselor educators/school administrators determine opportunities to assist school counselors in their knowledge and skills of data usage. Real-life application is encouraged so that it could increase the counselors’ feelings of competency and also their feelings of expectancy of usage. Holcomb-McCoy (2009); Joyce and Showers (1996); and Poynton (2009) suggest peer coaching, data training where counselors use their building’s data, regular opportunities for collaboration and reflection with colleagues about data usage, and pairing of counselor educators with school counselors on collaborative research projects using data. “Peer coaching not only contributes to the transfer of training, but it also facilitates the development of new school norms of collegiality and experimentation” (Holcomb-McCoy, et al., 2009, p. 350). This could support Love’s conditions of “collaborative culture” which could be a facilitative factor.

It is important to follow the CACREP standards by requiring students to create data-driven programs preferably during the field placement of internship. Murphy and Kaffenberger (2009) suggest a data collection project as part of the field experience. Hopefully, student counselors can then transfer that classroom learning during their field experience (Rowell, 2006). This could assist school administrators to see the value of school counselors being an integral part of the school’s data team thereby reducing one of the identified obstacles. These trainings can also help to set high expectations of using data that could increase accountability.
Although a statistical comparison between the two studies cannot be made, the findings of this study appear to support the Young and Kaffenberger’s findings that RAMP could provide incentive for school counselors’ use of data because RAMP Data Team Counselors scored higher on the Facilitator-Obstacle Index and also on Love’s 4 Conditions Index. Non-RAMP Data Team Counselors also scored higher on the Facilitator-Obstacle Index and also Love’s 4 Conditions Index. Non-RAMP Data Team Counselors scored higher on their frequency of data usage over the No Data Team Counselors and the RAMP Data Team Counselors.

This also supports ASCA’s encouragement of RAMP for school counseling programs. The results from this study also support encouragement of Non-RAMP data teams because Non-RAMP Data Team Counselors scored higher on their frequency of data usage over the No Data Team Counselors and the RAMP Data Team Counselors. If the Young and Kaffenberger (2011) and this study reported higher usage of data than No Data Team Counselors, it could encourage school counselors to follow the ASCA National Model and hopefully to apply for RAMP to increase that they are implementing a comprehensive, data-driven school counseling program. It could also encourage school counselors to be part of data teams within their schools to work collaboratively using data to help students be successful.

ASCA. In 2006, Poynton and Carey wrote “While the ASCA National Model identifies the necessity of school counseling program evaluation using quantitative methods for both planning and accountability, the model lacks practical procedures and techniques for actually engaging in those data-use activities.” (p. 129). Ten years later that still seems to holds true. If additional research supports Love’s 4 Conditions, then perhaps ASCA could strengthen their recommendations. Specifically, it could be beneficial to focus on Love’s 4 Conditions:
Collaborative Culture, Collaborative Structure, Wide-spread Data Literacy and Access to Useful Data.

ASCA suggests that the Advisory Council meets twice per year. Perhaps ASCA should also recommend that school counselors be a member of a diverse data team (a representative from every grade level, special areas, principal and counselor) similar to PBIS and Olweus Bully Prevention Committees. Love (2010) suggests “providing time for them to meet during the school day (ideally 45 minutes/week)” (p.3). This could encourage Collaborative Culture, Collaborative Structure and Wide-spread Data Literacy. Love also suggests high-quality professional development for data teams and data coaches. Data coaches are specially trained teacher-leaders/administrators who “guide data teams through the process of collaborative inquiry and influence the culture of schools to be ones in which data are used continually, collaboratively, and effectively to improve teaching and learning” (Love, Stiles, Mundry, & DiRanna, 2008, 20).

Perhaps the last component, Access to Useful Data, could be encouraged with internet-based data systems that make data easily accessible in a timely manner. PBIS-SWIS (see https://www.pbisapps.org/Pages/Default.aspx) is a relatively inexpensive way to use discipline referrals to guide interventions. It is typically about $150 per year per school. Other more comprehensive data warehouse systems like edInsight collect not only discipline data but also attendance, grade point averages, standardized test data, curriculum based assessments, suspensions, etc. (see http://www.onhandschools.com/index.php/products). EdInsight is like a one-stop shop where relatively any kind of data your school/district collects could be in their edInsight internet-based program. That means that all of that data is accessible wherever you have internet. It makes collaborative meetings easier because everyone has access to the data.
from their own laptops (whether at a meeting, in a different building, even from home). It makes coordinating and communicating much easier with outside agencies like doctor’s offices, wraparound agencies and parents. You can create an email distribution list for a student that includes both parents, doctors, wraparound agency, Children and Youth agency (anyone that would be working with that child to help them be successful). Instead of standing around to send 3-4 different faxes, school counselors can share that data with one email. Data can be a powerful tool to show a student’s success or lack of success. It can be our biggest voice to advocate for a student. More importantly, it is very powerful when sharing that data with a student. It gives the student that target/bull’s eye to aim for. Especially for younger children, it can be a fantastic visual tool for them to see where they are and where they want to be. Counselors need the tools and resources to make data easier to use. Poynton (2009) stated “Comprehensive developmental guidance” and “accountability” have been appearing consistently in the literature since the 1970s, yet many school counselors still struggle with the implementation of these activities” (p. 44). Perhaps exploring and recommending for school counselors to follow Love’s 4 Conditions can create the optimal environment to reduce the obstacles and increase the facilitators to school counselors using data and assist them to know how to make it happen.

Conclusions

There is still much that is not known about the obstacles and facilitators that influence school counselors’ usage of data. The findings of this study suggest that there are still a large percentage of school counselors that are not utilizing data to drive their counseling programs on a regular basis. There are a number of obstacles and facilitators that were reported in this study. This study suggests that counselors need to ascertain what their obstacles to using data might be. Once these obstacles are understood, then hopefully action plans can be put into place to
minimize these obstacles and capitalize on facilitators hopefully focusing on Love’s 4 Conditions for Data-based Decision Making.
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Appendix A

IRB Approval Letter

EXEMPTION DETERMINATION

Date: February 23, 2015
From: Jodi Mathieu, IRB Analyst
To: Billie Miller

Type of Submission: Initial Study
Title of Study: No School Counselor Left Behind: Counselors Use of Data and Their Perceived Obstacles and Facilitators
Principal Investigator: Billie Miller
Study ID: STUDY000001555
Submission ID: STUDY000001555
Funding: Not Applicable

Documents Approved: • Miller - Survey (0.01), Category: Data Collection Instrument  
• HRP-591 (0.01), Category: IRB Protocol

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are not required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within CATS IRB (http://irb.psu.edu).

This correspondence should be maintained with your records.
Appendix B

Informed Consent Form

Title of Project: No school counselor left behind: Counselors use of data and their perceived obstacles and facilitators

Person in Charge: Billie J. (Reish) Miller, M.S.  Supervisor: Richard J. Hazler, Ph.D.
Doctoral Student in Counseling Education Program  Professor of Counselor Education
331 CEDAR Building
44 Hickory Lane
570-660-2546  814-863-2415
bmiller@wasd.org hazler@psu.edu

Purpose of Study:
The purpose of this study is to determine what are the obstacles and facilitators to school counselors’ use of data.

Nature of Involvement:
All counselors who agree to participate will be given an online questionnaire to answer which will take about 15 minutes to complete on SurveyMonkey without any names attached.

Rights as a research participant:
Any questions you may have about the research procedures will be answered by contacting Billie (Reish) Miller or Richard Hazler.

Your participation in this research is completely voluntary. You are free to decline to answer any specific questions. You must be 18 years of age or older to participate. Your confidentiality as a participant in this research is assured through the strictly anonymous nature of your responses. No identifying information will be attached to your questionnaire. All anonymous questionnaires will be stored in locked drawers in the investigator’s offices until the research has been completed, at which time they will be destroyed so no permanent record of your individual responses will exist.

Granting Informed Consent: I agree to participate in this scientific investigation as an authorized part of the research program at Penn State University.

Completion of the survey is considered consent to participate in this research.
Appendix C
**before questions denotes that they are new questions that I am asking**

Data Beliefs and Practices Survey
(DBAPS)

**In 2003 and 2005, the American School Counselor Association (ASCA) created the ASCA National Model which outlines what school counseling programs should include. There are four elements of the National Model: (a) Foundation; (b) Delivery System; (c) Management Systems; and (d) Accountability. Under the element of Management Systems, the use of data in school counseling programs is further described. Please answer the questions to the following survey in regards to after the 2005 ASCA National Model was presented. Please answer each question based upon what you do and not what your school does.**

Please answer the questions with regards to two types of data: (from ASCA National Model)

1. **Student-achievement data-** (e.g. standardized test data, grade point averages, SAT & ACT scores, graduation rates, at or above grade achievement level in reading, math, etc., passing all classes, promotion & retention rates, drop out rates, completion of specific academic programs- i.e. academic honors, college prep, etc.) and
   2. **Achievement-related data-** is derived from the literature as to those areas correlated to academic achievement (e.g. course enrollment patterns, discipline referrals, suspension rates, alcohol, tobacco & other drug violations attendance rates, parent or guardian involvement participation in extracurricular activities, and home work completion rates).

Check All That Apply

1. What student population do you serve?
   [ ] Elementary [ ] Middle [ ] High [ ] Other (Please explain)

2. How many years have you worked in the school counseling profession?
   [ ] 0-2 [ ] 3-5 [ ] 6-8 [ ] 9-11 [ ] 12-14 [ ] 15-17 [ ] 18 or more

**3. What is your gender?**
   [ ] Female [ ] Male

**4. What is your ethnicity?**
   [ ] Asian [ ] Caucasian [ ] Other
   [ ] Black/African American [ ] Latino

5. Approximately how many students are on your caseload?
   ________

6. How large is your student population in the building(s) you serve?
   ________
**7. In what state is your school located?**

<table>
<thead>
<tr>
<th>Please respond to the following statements using this scale:</th>
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<tr>
<td>Strongly Disagree.............................................Strongly Agree</td>
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</table>

(1) Strongly disagree (2) Somewhat disagree (3) Slightly disagree (4) Neither agree or disagree (5) Slightly agree (6) Somewhat agree (7) Strongly agree

The following statements address your use of DATA as a school counselor. 

During your tenure as a counselor......

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<td>8.</td>
<td>I have increased my use of data to demonstrate the effectiveness of my school counseling program.</td>
<td>Strongly Disagree..................</td>
<td>Strongly Agree</td>
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<td>9.</td>
<td>I have maintained my momentum to use data.</td>
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<td>10.</td>
<td>I use data to identify barriers that impede student performance.</td>
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<td>11.</td>
<td>I regularly review my school’s data (academic, attendance, behavior) to identify gaps.</td>
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<td>12.</td>
<td>I use data to inform and facilitate the school counseling services and programs that I lead.</td>
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<td>13.</td>
<td>I use quantitative data collection methods to improve my school counseling services/programs.</td>
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<td>14.</td>
<td>I use qualitative data collection methods to improve my school counseling services/programs.</td>
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<td>15.</td>
<td>I analyze the data I collect.</td>
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<td>16.</td>
<td>Our school counseling department uses data to set strategic goals.</td>
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<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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<td>17. I use data to close achievement gaps that exist at my school.</td>
<td>1 2 3 4 5 6 7</td>
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<td>18. I use data to evaluate student enrollment patterns.</td>
<td>1 2 3 4 5 6 7</td>
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<td>19. I frequently conduct pre- and post-tests when facilitating classroom guidance lessons, workshops, and small group counseling interventions.</td>
<td>1 2 3 4 5 6 7</td>
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<td>20. I use data to prepare students for college readiness.</td>
<td>1 2 3 4 5 6 7</td>
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</tbody>
</table>

**21. What is your status as a RAMP school? (select one)**

- [ ] Achieved RAMP status
- [ ] Currently working towards RAMP status
- [ ] Not working towards RAMP status
- [ ] Don’t know
Part II: Check All That Apply

<table>
<thead>
<tr>
<th>Please respond to the following statements using this scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Training........................................................................Very Well</td>
</tr>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>(1) No Training (2) Very Little (3) Fairly well (4) Quite well (5) Very Well (6) Extremely Well</td>
</tr>
</tbody>
</table>

22. How well do you believe you were trained to use data? **No Training............................................Well |
| 1 2 3 4 5 6 |
| Graduate school | 1 2 3 4 5 6 |
| District profession development | 1 2 3 4 5 6 |
| State/national conference | 1 2 3 4 5 6 |
| Not trained | 1 2 3 4 5 6 |

Check All That Apply

<table>
<thead>
<tr>
<th>Please respond to the following statements using this scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree..................................................................Strongly Agree</td>
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<tr>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>(1) Strongly disagree (2) Somewhat disagree (3) Slightly disagree (4) Neither agree or disagree (5) Slightly agree (6) Somewhat agree (7) Strongly agree</td>
</tr>
</tbody>
</table>

23. I regularly share data with **Strongly Disagree..................................................Strongly Agree |
| 1 2 3 4 5 6 7 |
| Administrators | 1 2 3 4 5 6 7 |
| Other counselors | 1 2 3 4 5 6 7 |
| Teachers | 1 2 3 4 5 6 7 |
| Parents | 1 2 3 4 5 6 7 |
| Students | 1 2 3 4 5 6 7 |
| Others (List) | 1 2 3 4 5 6 7 |

24. I report data to stakeholders using: **Strongly Disagree..................................................Strongly Agree |
| 1 2 3 4 5 6 7 |
| Charts | 1 2 3 4 5 6 7 |
| Graphs | 1 2 3 4 5 6 7 |
| Narrative | 1 2 3 4 5 6 7 |
| I do not share data with stakeholders | 1 2 3 4 5 6 7 |
Part III:

CIRCLE ONE BELOW

**25. How often do you use data?

daily  biweekly  weekly  bimonthly  monthly  biyearly  yearly  never

**26. I am a member of a team that uses data?  Yes  No

**27. If you are a member of a team(s) that use data, how often do you meet to use data?

daily  biweekly  weekly  bimonthly  monthly  biyearly  yearly  never

Part IV: Check All That Apply

Please respond to the following statements using this scale:
Impedes my use of data........................................................................Facilitates my use of data

**28. What obstacles impede your use of data in your school?

a. Time available to use data in my school… 1 2 3 4 5 6 7
b. Importance of data use in my school… 1 2 3 4 5 6 7
c. My level of data skills… 1 2 3 4 5 6 7
d. My access to data in my school… 1 2 3 4 5 6 7
e. Data use culture at my school… 1 2 3 4 5 6 7
f. Availability to data teams in my school… 1 2 3 4 5 6 7

Other _____________________________________________________________

**29. How much does your school participate in these school-wide initiatives?

Check All That Apply  No Participation  Extensive Participation

Olweus Bully Prevention Program  1 2 3 4 5 6 7
Positive School-wide Support (PBS)  1 2 3 4 5 6 7
Recognized ASCA Model Program (RAMP)  1 2 3 4 5 6 7
Response to Instruction & Intervention (RtII)  1 2 3 4 5 6 7

Other _____________________________________________________________ 1 2 3 4 5 6 7
**30.** My school has a collaborative culture where staff members have shared norms and values that focus on collaboration. 1 2 3 4 5 6 7

**31.** My school has collaborative structures that facilitate meeting as teams to discuss data (i.e. study groups, grade level teams, school-based mathematics, reading and science leadership teams, etc.). 1 2 3 4 5 6 7

**32.** My school has wide-spread data literacy where staff have confidence and skills in understanding and interpreting data. 1 2 3 4 5 6 7

**33.** My school has timely access to useful data (getting the data in time to respond to it) 1 2 3 4 5 6 7

**34.** My school has easy access to useful data (not some place behind lock and key). 1 2 3 4 5 6 7
VITA

Billie J. Miller
bmiller41668@gmail.com

EDUCATION
Ph.D. Pennsylvania State University, University Park, PA Aug. 2016
M.S. Kansas State University, Manhattan, KS May 1994
B.A. Lock Haven University, Lock Haven, PA May 1990

LICENSES & CERTIFICATIONS
National Certified Counselor Certified 2013
School Counselor, Commonwealth of Pennsylvania Certified 2001
Olweus Bully Prevention Trainer Certified 2006
Second Step Trainer Certified 2002

TEACHING EXPERIENCE
Class Co-Instructor: Multicultural Counseling at Penn State University Fall 2010
Instructor: Behavior Modification at Penn College of Technology Spring 2011
Instructor: Child Development at Anna Maria College Fall 1998
Instructor: Freshman Seminar at Anna Maria College Fall 1998

COUNSELING EXPERIENCE
School Counselor: Williamsport Area School District, Williamsport, PA 2001-Present
Outpatient Therapist, Keystone Counseling & Evaluation Services, Lock Haven, PA 2011-2013
Counselor: Lock Haven University, Lock Haven, PA 2000
Child Therapist: Charter Behavioral Health Systems, Lock Haven, PA 1999

SUPERVISION EXPERIENCE
Practicum Supervisor: Master’s Level Counseling Practicum, Penn State University 2007-2014

PRESENTATIONS
Miller, B. (2006). Bullying: America Takes a Stand. Workshop given at IU 9 Summer Institute, Smethport, PA

STATE AND LOCAL PRESENTATIONS
Miller, B. (2006, June). Bullying: America Takes a Stand. Workshop given at IU 9 Summer Institute, Smethport, PA.