Effects of a Comprehensive School Counseling Training on Pre-ASCA-Trained School Counselors: A Single-Case Research Design

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Abstract

This study investigated the impact of a multicomponent training program on the American School Counselor Association's National Model of school counseling. The model was designed to enhance school counselors' competence in implementing a comprehensive school counseling program. An ABA single case design was used to collect baseline, training, and post-training data. The participants (*n* = 3) were pre-ASCA-trained school counselors with 15 years or more of school counseling experience. All exhibited growth during the training phase, which was sustained through the post-training phase.

Keywords: ASCA National Model, single case ABA design, school counseling program implementation survey

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The American School Counselor Association's (ASCA) National Model, first published in 2003, is now in its fourth edition (2019) and serves as the professional guide for school counselor education and school counselor practice for many school counselors (Frye et al., 2020). The model delineates appropriate school counselor work duties and differentiates them from those that hamper school counselors' ability to provide comprehensive school counseling services (Fye et al., 2020; Frye et al., 2018). The ASCA National Model prescribes that school counselors provide direct services to all students in the form of instruction, appraisal and advisement, and individual and group counseling (ASCA, 2019). The ASCA National Model espouses the idea that all students can benefit from comprehensive school counseling programs (CSCP). Benefits include increased academic achievement, personal and social development, and career planning (ASCA, 2019).

School counselors trained prior to the ASCA National Model tend to follow service-driven, developmental guidance and counseling models (Keys et al., 1998). A service-driven model provides services to the highest-achieving college-bound students and the lowest-achieving students, leaving students in the middle with limited services (ASCA, 2019; Burkard et al., 2012; Mason, 2010). While little is known about pre-ASCA-trained counselors' competence to effectively implement an ASCA National Model CSCP (Dahir et al., 2010), gaps in skill sets have been identified between ASCA-trained and pre-ASCA-trained school counselors. For example, pre-ASCA-trained school counselors may be viewed to be less competent at their work (Zyromski et al., 2019),

may be less skilled at the use of data to document student success (Astramovich et al., 2013), and may be less knowledgeable about current issues and evidence-based best practices in the counseling field (Wilczenski et al., 2010).

Pre-ASCA school counselors would benefit from the opportunity to learn the skills necessary to implement a CSCP in order to address the complex needs of all students (Hatch & Chen-Hayes, 2008; Keys et al., 1998). Many pre-ASCA school counselors may struggle to learn this information on their own (Dollarhide & Saginak, 2017). Little guidance is available to aid pre-ASCA-trained school counselors to close this knowledge gap (Dahir et al., 2009). The guidance that is available addresses the practicing school counselor population as if it were a homogenous group (Astramovich et al., 2005; Carey et al., 2012; Young & Kaffenberger, 2015). For example, three studies focused on school counselors' ability to assess the effectiveness of their CSCP programs and make needed improvements (Astramovich et al., 2005; Hartline & Cobia, 2012; Milsom & McCormick, 2015). The results of these studies indicate that school counselors, independent of their ASCA National Model training status, may lack the skills necessary to implement and conduct data-driven interventions. Furthermore, the authors of one of these studies (Milsom & McCormick, 2015) observed that a mentoring relationship between ASCA-trained and a pre-ASCA-trained school counselor can be beneficial to the pre-ASCA-trained school counselors' approach to data driven projects. Presently, there is a paucity of research focused specifically on how to train pre-ASCA-trained school counselor on the ASCA National Model (Carey et al., 2012; Hartline & Cobia, 2012; Milsom & McCormick, 2015). ASCA provides comprehensive National Model training to school districts and ASCA does not have empirical data that

documents the effectiveness of this training (Jen Walsh, Personal Communication, January 31, 2019).

Given the limited accessibility of ASCA-organized CSCP training coupled with the need for pre-ASCA-trained school counselors to receive evidence-based CSCP training (Hatch, 2014), a multicomponent ASCA National Model training program was designed specifically for pre-ASCA-trained school counselors. The impact of this training program on participating pre-ASCA-trained school counselors' competence in implementing a CSCP was investigated. Specifically, this study answered the following research questions: does participation in a training on the ASCA National Model significantly enhance pre-ASCA-trained school counselor participants' competence to implement a CSCP, and, do participants find the training to be socially valid?

Method

The study used a single case research design (SCRD) to evaluate effects of training on School Counseling Program Implementation Survey (SCPIS) scores (Clemens et al., 2010). A SCRD is a systematic, reliable, and continued appraisal over time that assesses change in an individual's targeted behavior (Gast & Ledford, 2014; Lenz, 2015; Sherperis et al., 2017). This study used a type of SCRD known as an ABA design where (A) designates a baseline phase, (B) designates an intervention phase, and (A) designates a reversal to original conditions. The participants in this study served as their own comparison across a three phase of study beginning at a baseline phase, continuing throughout an intervention (ASCA training) phase, and concluding with a maintenance (post-training) phase (Lenz, 2015). SCRDs use the same items and conditions multiple times to control for most internal validity threats and extraneous

variables (Gast & Ledford, 2014; Horner et al., 2005). Threats to internal validity were controlled by collecting data at least three different points of time during each phase (Horner et al., 2005). Threats to external validity (e.g., participant selection, only reporting successful scores, & attribution bias) were controlled for by clearly defining specific selection and exclusion criteria and including all participants who have completed the baseline and training phases (Horner et al., 2005).

Participants

Participants were practicing school counselors with at least 15 years of experience. This amount of experience was selected as a criterion to guarantee that participants graduated prior to the publication of the 2003 ASCA National Model. In addition, participants were responsible for implementing a CSCP and scored below 50 on the SCPIS (Clemens et al., 2010; Elsner & Carey, 2005). Scores below 50 indicate that a respondent has not fully implemented the ASCA National Model in their school counseling program and thus could benefit from training (Clemens et al., 2010).

Emails were sent to three surrounding educational service center directors of professional development which provide support to local school counselors through linking and hosting counselor connection groups. The email was forwarded to over two hundred school counselors on their lists and five individuals showed interest and met our inclusion criteria. One of these five fell ill and did not complete any baseline assessments. Another participant completed two baseline SCPIS assessments but dropped out of the study. Three participants completed the entirety of the training and completed all assessments. All participants were White females who graduated from CACREP-accredited school counseling programs.

Counselor One was 52 years old who earned her master's degree in 1995. Counselor One has worked as a school counselor in a public high school setting for 26 years, 20 years at the high school level and six years at the middle school level. Counselor One spends most of her time providing one-on-one and crisis counseling and completing administrative assigned non-counseling tasks such as test coordinator, record keeper, and master scheduler. Counselor One has written one comprehensive school counseling plan.

Counselor Two was 50 years old and earned her master's degree in 2000. Counselor Two has worked 19 years as a school counselor, 10 of which were at the high school level and the remainder of her experience was at the elementary level. Most of Counselor Two's time is spent providing responsive services such as crisis counseling and putting out fires, system support like managing 504 plans, and serving as the building test coordinator. Counselor Two does not have a written comprehensive school plan nor does she have a core curriculum.

Counselor Three was 54 years old and received her master's degree in 1994. Counselor Three has worked 30 years in public education including twenty years as a school counselor at a career education center working with upper-grade level students. Counselor Three spends the majority of her time providing responsive services focused on daily walk-in students, system support managing the new graduation requirements, and non-counseling duties like recruitment activities. Counselor Three does not have a written comprehensive school counseling plan nor a core curriculum. All three participants scored below 50 on the SCPIS (across four baseline measures), meeting inclusion criteria. Counselor One scored 32, 35, 38 and 34 (M = 34.25, SD = 3.30);

Counselor Two scored 36, 38, 32, and 31 (*M* = 37.83, *SD* = 9.47); and Counselor Three scored 38, 44, 48, and 48 (*M* = 46, *SD* = 4.72).

Measures

School Counseling Program Implementation Survey (SCPIS)

SCPIS is a 20-item measure that helps school counselors evaluate their CSCPs, assess their degree of ASCA National Model implementation, and assess needs for improvement (Elsner & Carey, 2005). The SCPIS contains three subscales. Subscale 1 measures programmatic orientation on CSCP development, management, and assessment. Subscale 2 assesses specific delivery school counseling services. The final subscale measures school counselors' use of computer software. The SCPIS's response options are: 1 = *not present*, 2 = *development in progress*, 3 = *partially implemented*, and 4 = *fully implemented*. Estimates of internal consistency using data collected from school counselors range from .79 to .83 (Clemens et al., 2010).

Demographic Data Form

The demographic form was used to gather data on participants' age, gender, race, education, years of experience as a school counselor, current school setting (such as public, private, charter, grade level), the year of graduation from their master's program, work time allocation across school counseling activities, and whether they have a written CSCP.

Procedure

This study was approved by the authors' institutional review board (IRB) and complied with the American Counseling Association's (ACA) code of ethics (2014). The ASCA National Model professional development training for the participants took place

in a lecture room located in a local county education service center. The room arrangement facilitated small group discussion and PowerPoint presentations. The space allowed for three hours of professional development without outside interruptions. The training phase consisted of three in-person, three-hour training sessions, which occurred once per week for three weeks. Take-home assignments allowed participants to apply the skills to continue to develop their written CSCP.

Intervention, Fidelity, and Social Validity

The ASCA National Model served as the conceptual framework for the development of the training protocol. The first author consulted with an expert panel of three members who possess knowledge and education in the ASCA National Model, train others in implementing a CSCP, and have at least two years of experience in implementing a CSCP. Each panel member reviewed the initial training protocol and training materials. Panel members' feedback was used to modify and improve the protocol. The revised protocol was returned to the panel for a second round of reviews. Additional feedback served as the catalyst for final adjustments to the training protocol, homework assignments, and treatment validity checklists.

The final training protocol focused on four interconnected quadrants (define, manage, deliver, and assess), four interwoven themes (leadership, advocacy, collaboration, and systemic change), and the input of experts in the school counseling profession (ASCA, 2019; Dollarhide & Saginak, 2017; Hatch & Chen-Hayes, 2008). The training emphasized school counselor competencies such as designing program goals, abiding by professional ethical standards, use of time assessment, and incorporation of

data (ASCA, 2019; ASCA, 2016). Training specifics are explained below to provide transparency about the independent variable (Ray, 2015).

The first author ensured treatment fidelity throughout the intervention by following the training protocol approved by the expert panel, having the participants complete a treatment integrity checklist, and keeping a log of any changes or threats to internal validity (Holt et al., 2015). A 22-item checklist was completed to collect procedural integrity data. Participants indicated whether each item was implemented as intended on an item-by item basis. The percentage of items implemented correctly was calculated for each session. The average integrity across sessions and participants was 99% (ranged from 89-100%).

In addition to the effects of the ASCA National Model Training on the pre-ASCA-trained counselor competency in implementing a CSCP, it is essential in an ABA design to assess the social validity of the intervention (Gast & Ledford, 2014). Social validity is the measure of importance of an intervention and target behavior on the degree of influence indicated by participants (Wolf, 1978). Holt and colleagues (2015) suggested social validity can be measured by asking participants to respond to questions about the interventions' relevance and interest, feasibility and necessity, and participants' satisfaction with the training. To that end, participants responded to the following five open-ended questions: (a) What did you find most and least helpful when implementing their CSCP?, (b) What suggestions do you have to improve the training?, (c) Is the ASCA National Model was important in your daily role as a school counselor?, (d) What is your understanding of the ASCA National Model?, and, (e) Do you plan to use the ASCA National Model in the future?

Training Day One

The first day of training began with a lecture that highlighted the history of school counseling, compared and contrasted the service delivery model with the ASCA National Model, reviewed the four components of the model, and modeled use of the tools provided (ASCA, 2019; Dollarhide & Saginak, 2017). This was followed by small group discussion. Participants were given a homework assignment to create a data-driven classroom lesson based on the ASCA's Mindset and Behaviors (2014) and an outline for a small group activity based on student needs. At the end of the training, participants completed the SCPIS survey online and the treatment fidelity sheet handout. After completion of the homework, participants completed the SCPIS again before the next training session. Participants were allowed to complete the homework assignment and the follow-up SCPIS based on their availability, as long as it was completed prior to the start of the next training session.

Training Day Two

A week later**,** the second day of training started with an oral review of their previous lesson and the outline of small group activity. The first author demonstrated the tools provided by ASCA in each component for school counselors to use to collect school data. A lecture and group discussion based on the themes of the ASCA National Model was highlighted to increase knowledge. Each participant shared how each theme applied to their school. Next, the academic, career, and social/emotional domains of the ASCA standards were reviewed, and participants were instructed to create a list of the counseling services in each domain that they currently implement at their schools. Participants realized they were already actively engaged in school counseling

programming in each of the domains. Participants were given a homework assignment to add an activity in the academic, career, and social/emotional domains for each grade level for each grading period and complete the school data profile. At the end of the training, the participants completed the SCPIS online and the treatment fidelity sheet. Participants first completed their homework and then finished the online SCPIS.

Training Day Three

A week later, the third day of training started by reviewing the homework assignment, followed by a lecture and group discussion on the use of data to drive a CSCP. Participants examined a case study and practiced using data to drive decisions on school counseling services to address the needs of the students. Participants learned how to access the accountability tools provided by ASCA, on the different types of data to gather on their schools, learn how to use, and analyze this data. For homework, the participants had to create an outline of a three- to five-year strategic plan to implement their CSCP. After completion of their homework, they finished their final SCPIS online assessment for the training phase. At the end of the training, the participants completed the SCPIS online, the treatment fidelity sheet, and provided feedback on the training's social validity (Gast & Ledford, 2014; Wolf, 1978). Specifically, participants answered five questions (Holt et al.,2015): (a) What aspects of the ASCA National Model training did you find the most helpful and will use when implementing your comprehensive school counseling program? (b) What aspects of the ASCA National Model training did you not find helpful and will not use when implementing your CSCP? (c) What suggestions would you give to improve the ASCA National Model training? (d) Do you feel the ASCA National Model is important in your

daily role as a school counselor? (e) do you feel more confident in your understanding of the ASCA National Model and how you can use it in the future?

Data Collection

In this study, an online SCPIS was administered twice a week for two weeks during the baseline phase to establish a pattern of response that can be used to predict performance (Horner et al., 2005). The SCPIS scores for each participant were assessed online using Qualtrics (2013). Participants then completed the SCPIS survey at the end of each training session and after completion of the assignments. Each participant had six data points from the training phase (one per training, one per assignment). The assignment and post-assignment assessment were completed prior to the next training session the following the week. The online SCPIS was administered during the maintenance phase at three, six, and nine weeks after the training was completed to assess retention.

Data Analysis

Visual analysis was coupled with the calculated nonoverlap of all pairs (NAP) method to determine the intervention's effectiveness (Parker & Vannest, 2009; Vannest & Ninci, 2014). The absence of overlap between phases is an indicator of performance change or effect size (Parker & Vannest, 2015). An overlap counts as one point. Ties count for .50 point. No overlap is scored as a zero. Each intervention data point is paired with every point in the baseline phase (Parker & Vannest, 2014). Then, the number of comparison pairs showing no overlap is divided by the total number of possible comparisons. The four data points in phase A were multiplied by the six data points in phase B to determine the total number of pairs (n = 24) for NAP examination

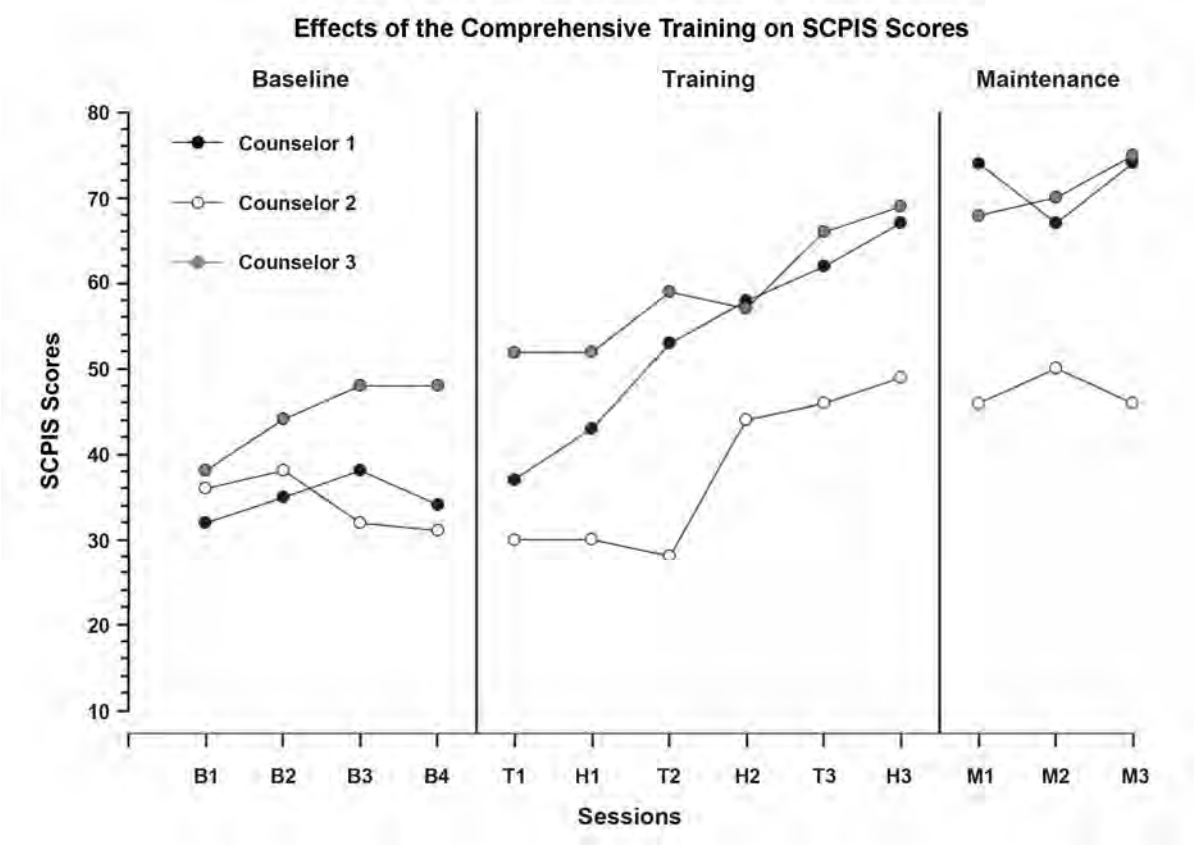
(Parker& Vannest, 2014). Thirteen overlaps existed between the six training phase data points and the four baseline data points. This resulted in an effect size of 82%, a moderate degree of effectiveness (Scruggs & Mastropieri, 1998).

Results

Formative Grapher (Cole, 2017), an open-source application for Microsoft Excel, was used to graph each participant's SCPIS scores (Vannest & Ninci, 2015) during all phases. Figure 1 illustrates the participants' competence levels at baseline, during the training, and after the training.

Figure 1

Effects of the Comprehensive Training on SCPIS Scores



Note. School Counseling Program Implementation Scores for the three phases of the study (two weeks of baseline, three weeks of treatment, and nine weeks of the maintenance phase).

Data paths connecting the 4 baseline, 6 intervention, and 3 post-intervention phase data points were created to show a behavioral change in each participant. Visual analysis revealed a functional relationship between the introduction of the training and scores on the SCPIS.

Counselor One

Janice's baseline scores were stable (*M* = 34.75), ranged from 32 to 38, with little variability (*SD* = 2.50), and no discernable trend. Her intervention scores (*M* = 53.33) had an increasing trend, ranged from 37 to 67 (*SD* = 11.46), and were well above the mean baseline of 34.74. Janice's SCPIS scores increased throughout the training phase. Janice's maintenance phase scores (*M* = 71.66) ranged from 67 to 74, (*SD* = 4.04), and were well above Janice's baseline mean score of 34.75. The trend fluctuated during this phase with an increase to 74 at three weeks, return to a 67 at six weeks, and an increase to 74 at nine weeks at or above Janice's final treatment phase score. The NAP effect size supports the visual graph, as 96% of the paired data points between Phase A (baseline) and Phase B (training) were nonoverlapping.

Counselor Two

Becky's baseline scores were stable (*M* = 34.25), ranged from 31 to 38, with little variability (*SD* = 3.30) and no discernable trend. Intervention scores (*M* = 37.83) had an increasing trend and ranged from 28 to 49 (*SD* = 9.47). SCPIS scores failed to increase immediately upon introduction of the training. Becky commented during the training, the more she learned about the model, the more she realized she was not implementing it. Becky's trend during the training decreased and the first three data points were below the baseline mean of 34.25. The trend increased following the second homework

assignment (fourth intervention data point) and the trend continued to be positive throughout the phase. Becky's maintenance phase scores (*M* = 47.33) ranged from 46 to 50 (*SD* = 4.04) and were well above her baseline mean score of 34.25. The NAP effect size supports the visual graph, as 50% of the paired data points between Phase A (baseline) and Phase B (training) were nonoverlapping.

Counselor Three

Linda's baseline scores were stable (*M* = 44.5), ranged from 38 to 48, with little variability (*SD* = 4.72) and no discernable trend. Counselor Three's intervention scores (*M* = 59.16) had an increasing trend, ranged from 52 to 69 (*SD* = 7.08), and were well above the mean baseline of 44.5. Linda's SCPIS scores increased throughout the training phase with constant improvement. Linda's maintenance phase scores (*M* = 71) ranged from 68 to 75, (*SD* = 3.60), and were well above Linda's baseline mean score of 34.75. Scores increased from the intervention level even after the training ceased. The NAP effect size supports the visual graph, as 100% of the paired data points between Phase A (baseline) and Phase B (training) were nonoverlapping.

In addition to the effectiveness of the ASCA National Model training, Wolf's (1978) construct of social validity measured the importance of the training and the participants' target behavior. Using open-ended response questions, participants were encouraged to give feedback on the training: what they found most and least helpful, suggestions for improvements, and what the importance of the ASCA National Model is in their role as school counselors. Janice said "the training impacted her goals for her counseling program this year and next. Janice had already implemented numerous school-wide programs using the ASCA's Mindset and Behaviors. Linda asserted "by

incorporating the accountability tools provided by ASCA in daily practice it increased her confidence to implement a CSCP.” At the completion of the training Becky reported “the whole training was extremely helpful. I think the one thing that meant the most was that this is an individual CSCP. I am no longer waiting for my colleagues to get on board, but I am going to lead." Counselors’ responses to the social validity questionnaire at the end of the training revealed all found the training to helpful, professionally important, and felt more confident in the ASCA National Model and how to use it in the future. The format seemed acceptable to improve competence along with changed attitudes suggesting all three participants may increase counseling services to students (Gast & Ledford, 2014; Mullins & Lambie, 2016; Wolf, 1978).

Discussion

School counselors find value in regular professional development opportunities and may benefit from training interventions focused on the design, implementation, and evaluation of school counseling programs (Astramovich, 2016). Due to their lack of training, confidence, and efficacy pre-ASCA-trained school counselors’ may not engage in these activities as readily as those counselors trained about the ASCA National Model (Milsom & McCormick, 2015). The training employed in this study was created to fill the training gap for pre-ASCA-trained school counselors. The ABA design was employed to investigate if pre-ASCA-trained school counselors would increase their competence in implementing a CSCP and, if so, would they retain the competencies learned during the training be sustained over time after completing the training. In addition, the authors sought to understand the counselors’ opinions of the usefulness of

the training, social validity, and the likelihood that they would use the ASCA National Model in their counseling programs.

This study's baseline findings demonstrated that all three participants lacked knowledge about the ASCA National Model. Specifically, pre-ASCA-trained school counselors were not trained about the overarching structure and competence needed to fully implement a CSCP (Hartline & Cobia, 2012).

The NAP results from the training phase revealed an effect size of 82%, which indicates moderate effectiveness (Scruggs & Mastropieri, 1998). Results also suggested that the training improved the participants' competence in the implementation of a CSCP as evidenced by an increase in SCPIS scores for all three participants (Astramovich, 2016; Hartline & Cobia, 2012; Milsom & McCormick, 2015).

The maintenance phase revealed that counselors' competence in the implementation of a CSCP was variable but still demonstrated growth across all three participants. The level of growth during this phase was unanticipated and may be attributable to the fact that participants used their new competencies in their local school counseling programs and shared their training with others. The participants were more capable of implementing more counseling services (Hartline & Cobia, 2012; Milsom, & McCormick, 2015; Mullins & Lambie, 2016).

Implications for School Counselors

These findings suggest that the ASCA National Model training designed specifically for this study may increase pre-ASCA-trained school counselors' competence in CSCP implementation. School counselors need to assess their professional competence yearly. Participating in an ASCA National Model training may

help school counselors improve their CSCP competencies, meet their professional responsibility for professional development, and promote positive student outcomes. In addition, the study facilitated one-on-one relationships between the trainer and the trainees. The trainees reported that this relationship helped them apply what they learned into their counseling practice, a finding consistent with Milsom and McCormick's assertion that mentorship is a key component to knowledge and skill transfer.

Counselor educators and school district counselor supervisors could use this study as a stimulus to develop comprehensive training for their practicing school counselors (Astramovich et al., 2005; Milsom & McCormick, 2015). Professional development that incorporates mentorship between ASCA-trained and pre-ASCA-trained school counselors could catalyze pre-ASCA-school counselors' growth and engagement with accountability activities.

Pre-ASCA-trained school counselors currently serve as site supervisors for school counselor trainees. Trainings such as those used in this study may have the potential to aid pre-ASCA-trained school counselors in their supervision and training of school counseling practicum students and interns (Astramovich et al., 2005; Milsom & McCormick, 2015). A structured supervision and mentoring program could provide a learning opportunity for pre-ASCA-trained school counselors and their mentees (Milsom & McCormick, 2015).

School district administrators may use these findings to design pre-ASCA-trained school counselors' professional development time to focus on training related to the ASCA National Model with the goal of improving their CSCP. An increase in competence and confidence of pre-ASCA-trained school counselors correlates with

positive outcome data of all students based on counseling program interventions of disadvantaged students to close the achievement gap (Carey et al., 2012; Dollarhide & Saginak, 2017; Mullins & Lambie, 2016).

Limitations and Suggestions for Future Research

The researchers created the training based on the key professional development objectives listed on the ASCA website and with the support of an expert panel. It is possible that this training differs materially from that provided by ASCA. The study's participants were homogenous in their physical location, sex, age range, and ethnicity. As such, these results have limited generalizability. Future researchers are urged to replicate these methods with a larger and more diverse sample. Summer trainings sessions may help to recruit larger samples. Similarly, the sample size limited the degree to which in-depth analysis of changes within individual participants could be conducted. Because the participants all received the same training at the same time, the study's rigor was unchangeable, unlike what could be achieved by using a multiple baseline design (Ray, 2015). Relationships between the trainer and the participants developed during the small training session. It is possible that these relationships could have inflated these results (Sheperis et al., 2017). Finally, the use of professional learning communities (Dufour et al., 2016) is recommended to help pre-ASCA school counselors fill their knowledge gap, provide mentoring, and increase self-efficacy levels of pre-ASCA-trained school counselors in the implementation of CSCP.

Conclusion

This study demonstrated that professional development training helped to fill pre-ASCA-trained school counselors' knowledge and educational gap. Counselor

educators, school district counselor supervisors, and professional organizations could utilize these methods to help school counselors' implement their own CSCP.

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