ATTITUDES OF TEACHERS TOWARD EVIDENCE-BASED PRACTICES

By Matthew C. Collins

This study examined the attitudes of teachers toward evidence-based practices (EBPs) among Pre-K through 8th grade regular and special education teachers within rural schools in north central Wisconsin. Implementation of EBPs lags behind research in most disciplines, including agriculture, medicine, mental and behavioral health therapy, and education. Implementation science has developed around this phenomenon in recent years and will be used in the State of Wisconsin to increase the adoption of EBPs to address achievement gaps between students with and without disabilities. The Evidence-Based Practice Attitudes Scale was used to determine the level of willingness to adopt EBPs among rural school teachers. Correlations were studied between willingness to adopt EBPs and teacher characteristics of age, total years of service, years of service in their current school, years of service in their current position, size of student population, and educational attainment. Significant findings of this study were (a) a teacher's age influences their perception of relevance of evidence-based practices, (b) years of service in a teacher's current school influences their willingness to adopt required practices, and (c) the size of the student population influences a teacher's openness to innovative practices. Implications for utilization of attitude measures for staff selection, readiness, and technical assistance determination were examined. Further research into educators' attitudes towards EBPs will be necessary to establish educator attitude psychometric data.

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by

Matthew C. Collins

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COMMITTEE APPROVAL

_____ Chair

1.3.18 Date Approved

Gladys VanHarpen Member

1/3/18 Date Approved

_____ Member

01/03/18 Date Approved

PROVOST & VICE CHANCELLOR

_____

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_____

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Chapter I

Introduction

"It is our attitude at the beginning of a difficult task which, more than anything else, will affect its successful outcome." - William James

Heraclitus is credited with saying, "The only thing that is constant is change," which may have given rise to the anonymous adage, "The only thing that stays the same is change." Yet, change often comes with difficulty and resistance. When new ways of doing things come along or are proposed, the statement, "We've always done it that way," is sometimes used as a justification for resisting change. Resistance to change has been explored by numerous scholars (Heifetz, 1994; Heifetz & Laurie, 1997; Heifetz, Grashow, & Linsky, 2009) and is prevalent in all disciplines, from agriculture to zoology, including education (Aarons, 2004; Blase, Fixsen, Sims, & Ward, 2015; Cook & Cook, 2011; Cook, Cook, & Landrum, 2013; Cook & Odom, 2013; Davis, 2007; Denton, Vaughn, & Fletcher, 2003; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Helms, 1991).

Public schools have either been subjected to, or initiators of, change through various school improvement efforts (Davis, 2007), with little return on the time and energy invested (Hornby, Gable, & Evans, 2013). Pressure for change in education continues with the recent requirements for public educators to close the academic achievement gap between students with disabilities and students without disabilities (Delisle & Yudin, 2014). Several initiatives to address the achievement gap have been

developed over recent years, including research-based practices, as well as strategies that address the research-to-practice gap (Blase et al., 2015; Fixsen et al., 2005). The concern over resistance to the adoption of research-based practices, or evidence-based practices (EBPs), has prompted considerable research and a relatively new field of implementation science (Eccles & Mittman, 2006; Fixsen et al., 2005). Applicable across disciplines, implementation science has recently been employed to assist states and local school districts identify and adopt EBPs (Eccles & Mittman, 2006; Fixsen et al., 2005). Practitioner attitudes toward the implementation of EBPs have also been an indicator of readiness to adopt innovations (Aarons, 2004; Fixsen et al., 2005). In an effort to assess an individual's readiness to adopt EBPs, this study measured attitudes of general and regular education teachers' willingness to adopt EBPs. Additionally, teacher willingness to adopt EBPs was compared with various demographic characteristics.

Background

The federal results-driven accountability initiative requires states to address the problem of the academic achievement gap (Delisle & Yudin, 2014). The results-driven accountability initiative has been promulgated in a joint effort between the Office of Special Education and Rehabilitative Services (OSERS) and the Office of Elementary and Secondary Education (OESE). Accountability of special programs was initially limited to procedural compliance since the passage of the Individuals with Disabilities Education Act (IDEA) in 1975 and the Elementary and Secondary Education Act (ESEA) in 1965, with an expectation for achievement gap reduction between students with and

students without disabilities and between students with and students without socioeconomic advantage. These efforts have led to increased compliance with documentation, but have had little or no impact on student achievement (Delisle & Yudin, 2014). Within the results-driven accountability initiative, the problem of the achievement gap is proposed to be addressed by technical assistance centers funded by federal dollars and administered by state education agencies to support local education agencies (Coulter, 2014). Technical assistance centers, to be comprised of EBP implementation system experts, will assist districts in selecting EBPs to be used with students with disabilities and target performance on standardized assessments, graduation rates, and early childhood development (Coulter, 2014). Coulter's (2014) summarization of the four original purposes of IDEA were:

- To assure all children with disabilities have a free appropriate public education (FAPE).
- To assure the rights of children with disabilities and their parents are protected.
- To assist states and localities in providing education for all children with disabilities.
- To assess and assure the effectiveness of the efforts to educate all children with disabilities. (pp. 9-16)

The fourth purpose of the IDEA law, assessing and assuring the effectiveness of efforts to educate children with disabilities, remains outside the tolerances of expectations and is the main focus of Office of Special Education Programs' (OSEP) goal of

"providing evidence-based instruction and interventions that prepare students for post-secondary opportunities" (Delisle & Yudin, 2014, p. 1).

Results indicators, including graduation rates, assessment, and post-secondary outcomes, as revised by OSEP for results-driven accountability, the new indicator of State Systemic Improvement Plan (SSIP), have been implemented in three phases (Coulter, 2014; OSEP, 2014). During the first phase, states were required to conduct data and infrastructure analysis and to develop a state-identified measurable result, coherent improvement strategies, and a theory of action by April 2015 (Coulter, 2014; OSEP, 2014). The second phase was to include developing a multi-year plan to address infrastructure development and support local education agencies (Coulter, 2014; OSEP, 2014). Local education agencies' implementation of EBP and evaluation plans was to be delivered by February 2016. During fiscal years three through six, states were to implement phase three of the SSIP in evaluation, which included reporting on results of ongoing evaluation, the extent of progress, and proposed revisions to the state performance plan (Coulter, 2014; OSEP, 2014).

Coulter (2014) advised local education agencies to consider their readiness for the introduction of results-driven accountability. The most critical items Coulter identified were (a) knowledge of the local education agencies' performance on procedural compliance over time, (b) performance measure results over time, (c) the state's identified measurable outcomes, (d) the local education agencies' capacity to support staff in improving results and sustaining procedural compliance, (e) inventory of local education agencies' resources, (f) staff needs and knowing/developing data sources

to measure and visualize performance, (g) the state education agencies' support for continuing professional learning, (h) costs of sustaining gains, and (i) public-political implications of results-driven accountability implementation (Coulter, 2014).

Evidence-based practices are at the center of the initiative in the second phase of the SSIP activities (Delisle & Yudin, 2014). Several resources exist on the Internet regarding EBPs, which include not only lists of EBPs, but implementation guides and professional development resources (Council for Exceptional Children [CEC], 2014). An example of such a resource is *A Special Educator's Guide to Successfully Implementing Evidence-Based Practices*, which highlights the importance of EBPs, provides a 10-step implementation process, includes sources to find EBPs, and provides a definition of evidence-based practice (Torres, Farley, & Cook, 2014). The online *What Works Clearinghouse* (WWC), established in 2002, houses over 700 publications and 10,500 reviewed studies, with eight topic/outcome domains containing summaries of the effectiveness of interventions for children with disabilities, practice guides, news reports, and several other resources specific to EBP (Institute of Education Sciences, 2014).

Another example of a web-based resource is the Center on Instruction (COI), established in 2005 as one of five national content centers funded by the U.S. Department of Education (USDE). Like the WWC, the COI provides resources for state education leaders to increase student achievement, close achievement gaps, and improve teaching and learning (RMC [RMC] Research Corporation, 2014). Resources also exist for local education leaders and teachers and include lessons and strategies for literacy, science, technology, engineering, English language learners, special education, response to

intervention, eLearning, and early learning. Each of these areas has searchable databases and offers resources, such as research guides, training modules, instructional tools, examples, standards and assessments, and professional development offering from around the country (RMC, 2014).

Despite the number of resources available, with such examples as listed above and professional development opportunities for instructional improvement and increased achievement, a gap remains between students with and without disabilities. Recalling Coulter's (2014) recommendations that local education agencies take action in preparing for results-driven accountability and closing the achievement gap, it appears several depend upon individual state education agency plans for addressing staff needs. Staff needs are multi-faceted, as argued by Hattie (2012), who proposes that there are discernible differences among low- versus high-effect teachers. The differences are expressed in attitudes and expectations and, ultimately, in low- versus high-achieving students (Hattie, 2012). Essentially, a teacher's attitude regarding student learning affects their expectations of student learning and decisions of what is taught and at what level it is taught (Hattie, 2012).

Related to attitude, another factor affecting adoption of EBPs is self-efficacy. Teacher self-efficacy and collective efficacy have a direct impact on student performance, where efficacious teachers are those who believe they can make a difference in student achievement and learning (Hattie, 2012). Combined, several high self-efficacy teachers together create a collective efficacy, which combats stereotypic or culturally entrenched beliefs within a school or system that certain populations cannot

learn (Bandura, 1997; Goddard, 2001). Filbin (2008) demonstrated that collective efficacy can be enhanced through the EBP teacher use of data to guide their teaching by providing feedback regarding the effects of their instruction. If the instruction employed is effective, continuation of the teaching strategy is warranted; whereas, if the data show a lack of expected progress, a different strategy would need to be implemented. Collective efficacy and attitudes toward using data to inform instruction also increased when teachers witnessed their principal using data-driven decision making and encouraging discussion around data (Filbin, 2008).

With the backdrop of accountability and the expectations for educators to use data to inform teaching practices, researchers have investigated the relationship between those comfortable with the process of data driven decision-making, the type of impact it would have on teacher instructional strategies, and teacher collaboration (Dunn, Airola, Lo, & Garrison, 2013). The confidence of the individual teacher in their capability to effectively use data-driven decision making in the classroom affects whether they implement this innovative practice (Dunn, et al., 2013). High level data-driven decision making efficacy generally increased collaborative behaviors and willingness to revise innovative practices based on student response (Dunn et al., 2013), as demonstrated by increased student performance in mathematics, resulting from increased teacher data-driven decision making knowledge and engagement (Airola & Dunn, 2011).

As stated, results-driven accountability is the next iteration of compliance monitoring the OSEP, in a joint effort with the OESE, will use to address the problem of the performance gap between students with and students without disabilities (Delisle &

Yudin, 2014). The impetus for this effort stems from the fourth original purpose of IDEA, which is to assure program effectiveness. States will be required to establish technical assistance centers for the purpose of providing training and supports to local education agencies in selecting and implementing EBPs (Coulter, 2014). Despite the availability of several resources regarding EBPs, including protocols for assessment for selection of EBPs, professional development resources, implementation guides, and research data regarding EBP effectiveness, the achievement gap persists. Studies have shown a pervasive disconnect between research-vetted practices and their use by teacher practitioners (Fixsen et al., 2005). Although there are a number of factors, self-efficacy, in particular, may account for a significant proportion of the achievement gap. Teacher self-efficacy influences attitudes, beliefs, and behaviors (Hattie, 2012). Higher teacher efficacy equates to higher belief in teaching ability and imparts one's willingness to accept and try innovative practices that result in higher achievement (Hattie, 2012). Approaches that improve teacher efficacy include intensive professional development centering on teacher perceptions and environmental awareness, teacher skill acquisition in data-driven decision-making, school principal leadership, and collective self-efficacy to foster individual and systemic efficacy (Airola & Dunn, 2011; Filbin, 2008; Hattie, 2012).

The National Implementation Research Network's (NIRN) State Implementation and Scaling-Up of Evidence-Based Practices Center (SISEP) provides an implementation framework that (a) identifies usable interventions, (b) defines implementation stages, (c) manages implementation drivers, (d) initiates improvement

cycles, and (e) establishes implementation teams (Blase et al., 2015; Fixsen et al., 2005; Fixsen, Blase, Horner, & Sugai, 2009a, 2009b). According to Blase et al. (2015), there are three drivers that influence implementation that need to be managed: (a) competency, (b) organizational, and (c) leadership. Each of these drivers includes processes to improve personnel competence, organizational systems, and leadership personnel. Personnel competence is facilitated by staff selection, training, and coaching (Blaseet al., 2015; Fixsen et al., 2005; Fixsen et al., 2009a). Blase et al. (2015) discussed coachability in reference to selecting staff for employment and utilization of interview tools, such as "vignettes, scenarios, or behavior rehearsals" (p. 14) that assess values, skills, and willingness to accept feedback. Fixsen et al. (2005) identified the *Evidence-Based Practice Attitude Scale* (Aarons, 2004) as a tool that measures staff readiness and willingness to adopt EBPs. Assessing staff readiness determines what level of technical assistance is needed. Blase (2009) identified three levels of technical assistance: basic, blended intensive, and intensive.

Problem Statement

Educators are faced with new accountability standards that demand school improvement that necessitate the adoption of innovative techniques, or EBPs, to address achievement gaps (Delisle & Yudin, 2014). Though EBPs gained notoriety and awareness in the early 2000s following the passage of No Child Left Behind Act (2001) and IDEA reauthorizations, the federal government's insertion of the results-driven accountability process into compliance reporting of special education programming has

re-energized the need for more EBPs. A lag in adoption of EBPs is evident in nearly every field of practice, including disciplines such as agriculture, medicine, mental health, economics, and teaching (Aarons, 2004; Blase et al., 2015). Implementation of EBPs often begins energetically, but fails to become an established practice that is sustained with any fidelity (Adelman & Taylor, 2003; Fixsen, Blase, Duda, Naoom, and Van Dyke, 2010), which may, in part, be influenced by attitudes held by practitioners (Aarons, 2004).

Purpose of Study

The purpose of this study was to measure teacher attitudes toward the implementation of EBPs, with the aim of determining what technical assistance will be needed as schools are compelled to adopt these practices. This study sought to examine the relationship between personal characteristics of teachers and their willingness to adopt EBPs, with an effort to identify generalizable factors, positive or negative, that affect the research-to-practice gap.

Research Questions

Research Question 1: What are teacher attitudes toward evidence-based practice?

Research Question 2: Are there relationships between individual teacher personal characteristics that correlate with personal and professional attitudes?

Research Hypotheses

1. There is a relationship between age of teachers and a willingness to adopt evidence-based practices.
2. There is a relationship between educational attainment and a willingness to adopt evidence-based practices.
3. There is a relationship between number of years of service and a willingness to adopt evidence-based practices.
4. There is a relationship between the number of years of service teaching in a current school and a willingness to adopt evidence-based practices.
5. There is a relationship between number of years of service in one teaching position and a willingness to adopt evidence-based practices.
6. There is a relationship between the number of students in a school and a willingness to adopt evidence-based practices.

Definition of Terms

Attitudes: "A precursor to the decision of whether or not to try a new practice," operationalized by four domains of intuitive appeal, response to organizational requirements, openness to innovation, and a perceived divergence between current and new practices (Aarons, 2004, p. 62).

Appeal: Subscale domain name from the Evidence-Based Practice Attitude Scale (Aarons, 2004), defined as the intuitive appeal an EBP has to the practitioner and influenced by the source of the information. Appeal increases when information originates from colleagues.

CESA: Cooperative Educational Service Agency.

Divergence: Subscale domain name from the Evidence-Based Practice Attitude Scale (Aarons, 2004), defined as the practitioner's perception of whether an EBP is congruent with current practices or unnecessary.

EBPAS: Evidence-Based Practice Attitude Scale (Aarons, 2004)

Evidence-based practices (EBPs): "EBPs are practices and programs shown by high-quality research to have meaningful effects on student outcomes" (Cook & Odom, 2013, p. 136).

Fidelity: "The term is synonymous with treatment integrity, program adherence, intervention integrity, and fidelity to the practice" and "the degree to which educators used the intervention as intended" (Blase et al., 2015, p. 16).

Implementation Science: "Implementation research is the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services. It includes the study of influences on healthcare professional and organizational behavior" (Eccles & Mittman, 2006, p. 1).

Likert scale: "A psychometric response scale primarily used in questionnaires to obtain participants' preferences or degree of agreement with a statement or set of

statements. Likert scales are a non- comparative scaling technique and are unidimensional (only measure a single trait) in nature. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale." (Bertram, n.d.)

NIRN: National Implementation Research Network.

Openness: Subscale domain name from the Evidence-Based Practice Attitude Scale (Aarons, 2004) characterizing a practitioner's willingness to attempt innovations and embrace change.

OSEP: Office of Special Education Programs.

PDSA: "Plan-do-study-act cycles provide a structure for iterative testing of changes to improve quality of systems" (Taylor et al., p. 290).

Requirements: Subscale domain name from the Evidence-Based Practice Attitude Scale (Aarons, 2004) characterizing a practitioner's compliance with organizational policies, rules, or regulations regarding implementation of EBPs.

Self-efficacy: The belief in one's ability to influence events that affect one's life (Bandura, 1994).

SISEP: State Implementation and Scaling up of Evidence-based Practices.

SSIP: State Systemic Improvement Plan.

Technical assistance: A "standard, overarching strategy for assisting, states, agencies, family members, and practitioners with building capacity for service and system change initiatives" (Blase, 2009, p. 1).

Procedures

A quantitative survey study and descriptive research methodology was used in this study. The survey was administered to a defined set of educators utilizing a convenience sampling of respondents from within the northcentral region of Wisconsin. Data were collected using the research validated and published instrument the Evidence-Based Practice Attitude Scale (EBPAS), which was paired with a series of demographic questions (see Appendix A). The instrument and survey were administered through Google Forms and distributed via email to building administrators, who then forwarded the email to individual teachers. The instrument was completed by participants in a location of their choosing, wherever they had access to a computer and email.

Analysis of data included frequency distribution, descriptive statistics, and correlation analysis to examine the association of EBPAS subscale and total scores with the demographic characteristics of respondents.

Significance of Study

Measurement of teacher attitudes toward the implementation of EBPs helps determine what technical assistance strategies are needed, as schools are compelled to adopt these practices. Adoption of EBPs has been shown to be slow across disciplines (Helms, 1991; Rogers, 1995). The relatively new field of implementation science (Eccles & Mittman, 2006) has provided insight about the causes of implementation delay, helpful

strategies to overcome these delays, and organizing guidelines that assure fidelity when EBPs are adopted. In the field of education, there exists a significant achievement gap between children with and children without disabilities. The federal government, which has been providing funding to address this gap, is now requiring states and local school districts to close the achievement gap by selecting and implementing evidence-based reforms (Delisle & Yudin, 2014).

Implementation science has identified several factors influencing the adoption and sustainability of EBPs (Fixsen et al., 2005). The literature reviewed for this study included (a) research associated with protocol for scaling up of EBPs; (b) studies of individual teacher factors, such as self-efficacy; (c) investigations into technical and adaptive change models; (d) explorations into technical assistance needed to facilitate change; (e) examinations of individual practitioner attitude toward EBPs; (f) formulated theoretical frameworks of social learning; (g) discussions of integrated theory of change; (h) and research regarding discourse theory. The aforementioned practical and theoretical models include findings associated with the development of attitudes and behavior change and are important to understanding the underlying factors associated with adoption of EBPs.

The EBPAS measures the connection between individual teacher self-efficacy, the implementation driver of staff competence, and the willingness to adopt EBPs. The resulting information can be utilized in determining the level of technical assistance, which ranges from basic to intensive, needed for EBPs to be implemented with fidelity

and sustainability. The fulfillment of EBP implementation, ultimately, improves student outcomes and satisfies state and federal initiatives to close the achievement gap.

Limitations

This study was limited by the size of the representative sample of participating teachers. Subgroups often had only one respondent, thereby making it impossible to derive any statistical data to test the validity, reliability, and effect size of certain independent variables. This limitation is most pronounced among the special education participants, where valid comparisons between regular and special educator attitudes were unable to be ascertained. While the individual characteristics of grade level teaching position and special education category were included in the survey, responses were too limited in the number of respondents to create groups for comparisons.

Though the email containing the solicitation of teacher participation was sent to district administrators, with a request to forward on to targeted district teaching staff, some did not follow through with research protocol, while some delegated the task to a principal or other district leadership staff member. Given that the email was sent at the end of the school year, the number of unsolicited emails received by teachers was likely higher, and the resulting email overload may have reduced response rates (Sheehan, 2001). Additionally, there was no opportunity to send pre-notification and follow-up emails, which have been shown to improve response rates (Sheehan, 2001).

Adaptations were made to the EBPAS prior to being subjected to a rigorous psychometric evaluation. The original version of the EPBAS was standardized with

mental health providers in mind, with terms familiar to that group. Terms were substituted for those familiar to teachers; this may have compromised standardization.

Delimitations

The scope of this study was geographically limited by design. As a matter of convenience to the researcher, the pool of schools was limited to school districts and their respective district administrators available by association with the cooperative educational agency in the State of Wisconsin through which the dissertator was employed. As a result, regional differences among teachers within the State of Wisconsin could not be ascertained; therefore, results should not be generalized beyond the region in which the study was conducted.

Furthermore, specialist educators, such as reading specialists, Title I teachers, music teachers, Spanish teachers, pupil service personnel (counselors and school psychologists), related service personnel, secondary teachers, and administrators were excluded from the study. While each of these disciplines is likely to harbor attitudes toward adoption of EBPs, the purpose of this study was to examine attitudes of teachers charged with the task of delivering instruction in the elementary and middle school grades.

Summary and Organization

This chapter presented the introduction to the study, which outlined the pervasive and persistent issue of the research-to-practice gap that exists in nearly every discipline.

The relevant background in public education was presented and highlighted the impetus behind the movement to adopt EBPs, which include state and federal requirements to implement EBPs that will effectively close the achievement gap. The purpose of the study was presented as an effort to assess the general willingness of public school teachers to adopt EBPs, investigate factors affecting teacher attitudes toward EBPs, and render usable information to technical assistance providers when helping schools with the EBP implementation process. The study sought to understand teacher attitudes toward EBPs and what, if any, relationships between individual teacher personal characteristics correlate with personal and professional attitudes. Terms unique to the study were defined. A brief outline of the procedures included a description of the targeted population, survey, the EBPAS instrument, and the process used to solicit participation. The significance of the study is that it provides a portrait of teacher attitudes from special and regular education teachers that can be used to inform technical assistance planning. The study is primarily limited by the overall number of respondents to the questionnaire, with implications that will require purposeful sampling over a broader number of educators.

Chapter II provides a review of literature, which includes an overview of implementation science, teacher self-efficacy, technical and adaptive change, levels of technical assistance, readiness and implementation stages, attitudes toward EBPs, and the theoretical frameworks of social learning theory, integration theory of change, and discourse theory.

Chapter III outlines the research methodology, data collection procedures, the instrument of data collection, and the statistical procedures for data analysis, as well as research support and rationale for each. Teacher attitudes toward EBPs were assessed through the use of a previously developed and research-validated measure of attitudes. A descriptive and correlational methodology was used to explore the relationship between individual demographic data collected and attitudes of teachers toward EBPs, as measured by the EBPAS. Subjects for the study were included by convenience sampling from a defined region in northcentral Wisconsin.

Chapter IV reports the findings of the study, including the number of participants overall, the number of regular education participants, the number of special education participants, the means for each of the independent and dependent variables, the correlational values between independent and dependent variables, and identifies those relationships with significant values.

Chapter V provides a summary of findings, implications, consistencies and inconsistencies with literature, limitations, delimitations, and recommendations for future research.

Chapter II

Review of the Literature

Introduction

Heraclitus is credited with saying, "The only thing that is constant is change," which may have given rise to the anonymous adage, "The only thing that stays the same is change." Yet, change seems to come with difficulty and resistance. When new ways of doing things come along, or are proposed, the statement, "We've always done it that way," is sometimes used as a means of resisting change. Issues related to implementation of EBPs are evident in a variety of disciplines, including agriculture, medicine, behavioral health, and education. The first discussion of EBP occurred at the turn of the 20th century in the field of agriculture, about which Helms (1991) reported on the EPB implementation gap phenomenon regarding the practice of crop rotation; where farmers were slow to adopt, despite numerous studies and evidence supporting the practice.

In the medical profession, EBP has been defined as "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence from systematic research" (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996, p. 71). In medicine, the practice of handwashing in hospital settings to prevent childbirth fever took nearly 20 years to establish, even after data were published regarding its effectiveness (Best & Neuhauser, 2004). In behavioral health, practice lags behind research identified practices that have positive client therapeutic

outcomes for children, adults, or families (Bernfeld, Farrington, & Leschied ,2001; Institute of Medicine, 2001; National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment, 2001; President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 1999; 2001). These examples demonstrate the pervasive nature of EBP implementation in disciplines other than public education.

In education, there is also a gap between research and practice, where there is a disproportionate amount of effort in developing versus implementation of EBP protocols (Cook & Cook, 2011; Cook, et al., 2013; Cook & Odem, 2013; Davis, 2007; Denton et al., 2003; Fixsen et al., 2005). Implementation of EBPs often starts with high energy, but fails to become established or sustained with fidelity (Adelman & Taylor, 2003; Fixsen et al., 2010; Gandhi, Vaughn, Stelitano, Scala, & Danielson, 2015; Hornby et al., 2013; Vanderlinde & van Braak, 2010). This is problematic because adoption and implementation of EBPs is necessary in an era of increased educational accountability, where a primary goal is to reduce the gap between students who perform at low levels and those students who perform at or above proficiency (Delisle & Yudin, 2014).

The burgeoning field of implementation science focuses on narrowing the gap between research and implementing EBP practices (Eccles & Mittman, 2006). Implementation science is defined as "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice" (Eccles & Mittman, 2006, p. 1). In their review of literature related to implementation science, Fixsen et al. (2005) found three degrees of implementation:

paper implementation, process implementation, and performance implementation. Paper implementation is characterized by processes and procedures written for outside scrutiny and compliance without attention given to actual implementation (p. 6). The second degree, process implementation, expands on paper implementation by training practitioners in the process and procedures, but there are no procedures for validation of implementation (p. 6). Performance implementation incorporates assessment of functional outcomes from implementation of policy and procedures introduced into the system (p. 6). Performance implementation, therefore, includes paper and process implementation, but adds an assessment component for implementation and outcome verification.

The purpose of this study was to measure teacher attitudes toward implementation of EBPs. The practical goal of the study was to determine the technical assistance needed when schools are compelled to adopt these EBPs. The literature reviewed in this chapter includes implementation science, teacher self-efficacy, technical and adaptive change, levels of technical assistance, readiness and implementation stages, attitudes toward EBPs, and the theoretical frameworks of social learning theory, integration theory of change, and discourse theory.

Review of Literature

Fixsen et al. (2005) proposed a conceptual framework for implementation consisting of five components: source, destination, communication link, feedback, and influence. Implementation of programs or practices in any discipline starts with a source,

which is a program or practice exemplar that has been developed and evaluated (p. 12). The destination is defined as the individual and organization that puts the intended source or exemplar practice in place and maintains its use (p. 12). The communication link is the component where training is provided to the destination group for implementation of the source program or practice (p. 12). The feedback component is a mechanism used to collect data regarding implementation performance of practitioners (p. 12). Influence components are those social, cultural, psychological, economic, political, and/or historical forces that influence individuals or organizations in ways that drive expectations for a source exemplar (p. 12). The expected outcomes for implementation strategies are changes in behavior, organizational structures, and in relationships between stakeholders and systems partners (p. 12).

Within the communication link component, Fixsen et al. (2005) identified six typical stages of implementation, starting with an exploration of a practice or program and whether or not it addresses a need (p. 15). Once the selection of a practice is made, it is put into place in a stage known as program installation and where resources are allocated. Monetary, human, capital, and training resources are necessary in the process of informing others of the program selection and its ultimate implementation (p. 16).

Program installation, as identified by Fixsen et al. (2005), has an initial implementation phase, characterized by changes in daily practices (p. 16). In this phase of implementation, there is much uncertainty, and implementation can be derailed as a result of proficient skillsets (p. 16). Additionally, sociopolitical factors may erode the implementation process as scrutiny by community stakeholders or organizational

personnel develops skepticism of the EBP (p. 16). Once all new learning required to implement the EBP has been integrated into all processes and procedures, as well as into the entire organizational system, it is said to be fully implemented or at full operation (pp. 16-17). The success of a new practice moving through this phase of implementation appears similar to a vetting process, or testing period, where the EBP survives scrutiny, or subversive efforts by any organizational stakeholder or group of stakeholders.

After the EBP has been in full operation mode for a period of time, there are, oftentimes, perceived opportunities for modification to the program or practice. Fixsen et al. (2005) identified this as the innovation phase (p. 17). There are risks in modifying the practice, which can lead to an erosion of the program's fidelity; conversely, modifications may lead to improved programming (p. 17). If the changes are significant, there may be a need to revisit the appropriateness of the selected EBP and intended outcomes to determine whether an entirely different EBP is required (p. 17). Program modifications, therefore, should be reviewed in light of the program's initial intent before changes are made; otherwise, the program's effectiveness may decline.

The final stage in implementation process, as reported by Fixsen et al. (2005), is sustainability, which occurs when the fully implemented EBP has been in place for two to four years (p. 17). Organizations must be prepared to respond to changes associated with personnel changeover, funding streams, new issues competing for attention, and other sociopolitical factors if the initiative's intended outcomes are to be preserved (p. 17). Organizational change may lead to uncertainty or scrutiny of the practice, which may require additional training and education of stakeholders if the practices are to endure.

The NIRN has developed a project that supports education known as the SISEP, whose purpose "is to help States establish adequate capacity to carry out effective implementation, organizational change, and systems transformation strategies to maximize the academic achievement and behavioral health outcomes of students statewide," (Fixsen et al., 2009b, p. 1). Funded by the OSEP, the SISEP provides states and districts with technical assistance for EBP implementation and fosters professional learning, development of accessible coaching, and gathering resources for the work of implementing EBPs (Blase, 2009; Fixsen et al., 2009a).

The NIRN implementation frameworks cover (a) usable interventions, (b) defining implementation stages, (c) managing implementation drivers, (d) initiating improvement cycles, and (e) establishing implementation teams (Blase et al., 2015). To be usable, interventions must have the ability to improve student outcomes and be operationalized for the purposes of being taught to practitioners, learned by practitioners, and actionable within an organization (p. 5). Defining implementation stages is the process of outlining the components of exploration, installation, initial implementation, and full implementation (p. 5). Implementation drivers are characteristic factors of individuals and organizations that influence effective execution of EBPs, which include competency drivers, organizational drivers, and leadership drivers (p. 5). Successful implementation of EBPs is improved through management of these drivers (p. 5). Competency driver management includes staff selection, training, and coaching (p. 5). Organization driver management includes instillation of systems intervention, selection of facilitative administration, and adherence to decision support data systems (pp. 12-18).

Efforts to sustain EBP implementation include establishing improvement cycles that reflect the plan-do-study-act (PDSA) cycle promoted by Deming (as cited by Blase et al., 2015, p. 6). The steps of the PDSA cycle includes (1) identifying current or potential problems within the implementation of an EBP, developing a hypothesis for the cause of the problem, developing a plan for addressing the problem, along with a plan for measuring improvement effectiveness; (2) putting the plan is in place; (3) analyzing whether the plan was carried out as specified, along with the data collected to measure effectiveness; (4) either adopting the solution to the problem identified, if it was effective, or returning to the plan phase for the next cycle of PDSA; and (5) invoking the PDSA cycle repeatedly until the problem is resolved (p. 19). Finally, the implementation team manages the implementation processes from planning to full implementation (p. 6). At the center of the implementation framework is managing implementation drivers, which is discussed below and leads to the importance of personnel selection.

Within the NIRN implementation framework the three implementation drivers of competency, organizational, and leadership are required for EBP implementation (Fixsen et al., 2009a). Blase et al. (2105) described processes for each of the drivers. Personnel competence is facilitated by staff selection, training, and coaching (Blase et al., 2015; Fixsen et al., 2009a). Additionally, Blase et al. (2015) recommend utilizing interview tools such as "vignettes, scenarios, or behavior rehearsals" in order to assess a candidate's values, skills and willingness to accept feedback as a measure of coachability (p.14). Utilizing these tools in selecting staff who are most willing to accept feedback is important if those staff will be expected to adopt new and innovative practices (p. 14).

Managing these drivers ensures implementation of EBPs within a system by accounting for variables known to influence program adoption, implementation, sustainability, and fidelity. The following section discusses factors that influence these drivers.

Teacher self-efficacy. Willingness to accept feedback or, by extension, willingness to adopt EBPs which depart from those currently used in a school system is governed by at least one factor associated with what Bandura (1994) calls self-efficacy. Self-efficacy is the belief in one's ability to influence events that affect one's life (Bandura, 1994). Teacher self-efficacy and collective efficacy have a direct impact on student performance (Dunn et al., 2013). Essentially, efficacious teachers are those who believe that they can make an educational difference with their students (Hattie, 2012). Several high self-efficacy teachers can combine to create a collective efficacy, which combats stereotypic or culturally entrenched beliefs within a school or system that certain populations cannot learn (Bandura, 1997; Goddard, 2001). Filbin (2008) demonstrated that collective efficacy can be achieved through teachers' use of data, which provides teachers with evidence of student learning and effectiveness of their instruction. These data either change instruction or reinforce current practice. Although there appear to be limited or mixed evidence that increased student achievement increases efficacy, collective efficacy has been shown to increase when teachers have witnessed principals using data-driven decision making and when data-driven discussion is encouraged (Filbin, 2008).

Teacher self-efficacy is influenced by wellbeing, in turn, affecting learning environments. Cultivating Awareness and Resilience in Education (CARE) for teachers

focuses on the wellbeing of teachers and has impacted improved perception of self-efficacy (Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013). By reducing burnout and time-related stress and increasing mindfulness through programs such as CARE, classroom environmental improvements could lead to closing the achievement gap (Jennings et al., 2013). Addressing concerns of teachers can increase the likelihood of adopting EBPs and is an important characteristic to be considered during implementation (Dunn et al. 2013, p. 225).

Adoption of EBPs is also influenced by perceived efficacy in the use of data. With the backdrop of accountability and the general expectations by the education community for teachers to use data in their teaching practices, researchers have investigated the relationship between those comfortable with the process of data-driven decision making and the type of impact it has on teacher instruction and teacher collaboration (Dunn et al., 2013). Data-driven decision-making efficacy, the confidence of the individual teacher in their capability to effectively use data-driven decision making in the classroom, affects the way teachers embrace the innovative practices that come out of the analysis of data (Dunn et al., 2013, p. 226). Increased student performance in mathematics resulted from increased teacher data-driven decision making knowledge and engagement (Airola & Dunn, 2011). High levels of data-driven decision making efficacy generally accompanied increased collaborative behaviors with peers and behaviors associated with revision of innovative practices based on student responses (Dunn et al., 2013). As confidence with use of data increases, confidence, or self-efficacy, for implementation of EBP also increases.

Technical and adaptive change. Adoption of EBPs requires a departure from whatever practice is currently operating in a particular system, organization, clinic, or classroom. As a result, the individuals in those entities are presented with change. Heifitz (1994) described organizational change as falling into two categories, technical and adaptive (p. 8). Technical change requires process and procedural implementation of protocol or checklist which addresses challenges that are concretely defined, leading to generally accepted understanding of an issue, amenable to current resolution strategies, and typically administered from the top institutional leaders (Blase et al., 2015, p. 3). In contrast, adaptive challenges are addressed through a reflective practice of all stakeholders in an organization (Heifetz et al., 2009, p. 19), where individuals must reconsider values, beliefs and practices in their work (Blase et al., 2015, p. 3). If a problem is addressed through the technical change process when the issue requires adaptive change, the change effort is likely to fail (Heifetz et al., 2009, p. 19).

According to Blase et al. (2015), no problem can be completely technical or adaptive in nature (p. 19). Additionally, Blase et al. (2015) found that individuals in the midst of adaptive change can experience emotional reactions, including loss, grief, disloyalty, and feelings of incompetence, as they are required to move out of their comfort zones into the unknown. To address the potential negative reactions to adaptive change, Blase et al. (2015) recommend utilizing Heifetz and Laurie's (1997) six approaches: (a) getting on the balcony, or taking a broad overview of the system that includes data and examining trends influencing the system; (b) identifying adaptive challenges that may cause conflict; (c) regulating distress, accomplished by setting a plan

that has a discernible, tempered pace and will not overwhelm the people involved in the work; (d) maintaining disciplined attention, which involves being able to recognize when there is a return to the old ways and then redirecting it back to the adaptive work; (e) giving the work back to the people, or letting the people who will be doing the work take charge, initiative, and ownership of the work; and (f) protecting all voices, or recognizing that concerns need to be heard, honored, and addressed. According to Blase et al. (2015), these six approaches address the unease associated with adaptive change and create a sense of ownership among the staff.

Implementation of EBPs is an example of a system change that requires both technical and adaptive problem solving, since adopting an EBP is generally not something encountered by stakeholders in any organization, including school systems Fixsen et al., 2005). The technical change strategies in the process of adopting an EBP include invoking written procedures that are easily shared and learned. Adaptive change strategies include individual cognitive, psychological, emotional, and attitudinal shifts associated with changing personally held convictions regarding current practices. Assessment of attitude toward EBP adoption is a technical application, yet has adaptive challenge utility by informing the process of implementation barriers or, conversely, catalysts.

Levels of technical assistance. As adaptive change continues in an organization, technical change during the implementation is required to maintain forward progress. Blase (2009) presented three levels of technical assistance: basic, blended intensive, and intensive. The level to be used is dictated by the expected outcomes. For example, the

level of technical assistance needed for awareness building is far less intense than is required for a complete system change (p. 3). Basic technical assistance is characterized by dissemination of information, which is required before people can accept or adopt change (p. 5). Intensive technical assistance includes basic technical assistance and is characterized by providing (a) clarity of roles and functions among those doing the work, communication strategies, and an overall picture of the current system; (b) frequent communication utilizing any and all media available; (c) intensity of collaboration that allows for review of progress, plans for moving forward, and on-site coaching; (d) duration of technical assistance between two to five years; (e) integrity of technical assistance in establishing a data-driven decision making process that creates a coherent multi-service system based on appropriate assessment protocol; and (f) accountability for bringing about the change (p. 3). Not only might intensive technical assistance be required for change in a system as a whole, it may also be necessary for individual practitioner competence building (p. 7). Fidelity of implementation leads to improved outcomes, which is dependent upon practitioners' skill sets or competencies and may require intensive technical assistance to build their capacities (p. 7). Technical assistance during system or individual change is necessary to keep the structure of the adaptive change protocol in place when the structure of the protocol may not be well understood. Ultimately, technical assistance prevents departure from the process of installing and implementing EBPs. If technical assistance providers have an assessment of individual, or collective attitudinal data, personnel development strategies can be customized and targeted more efficiently.

Readiness and implementation stages. Implementation of change progresses in stages: exploration, installation, initial implementation, and, finally, full implementation occurring over a two- to four-year period (Blase et al., 2015). Implementation survivability is most vulnerable during the exploration and implementation stage, since only 20% of staff in any given organization are ready and willing to adopt initiatives proposed (Blase et al., 2015, pp. 10-11; Laforge, Velicer, Richmond, & Owen, 1999, p. 68). Adaptive challenges exist at every stage of implementation, which include identification of readiness for innovation in the exploration stage, resource acquisition and program sustainability in the installation stage, and waning practitioner self-efficacy in the initial and full implementation stages (Blase et al., 2015).

Fixen et al. (2005) reported that, although at the time there were no data to support any program aimed at developing readiness or buy-in for implementation of innovations, Denton et al. (2003) argued that within schools, sustainability of adopted innovations requires (a) teacher acceptance and commitment to the innovation, (b) clear buy-in of all faculty, (c) teacher sense of professionalism and self-determination, (d) teacher perception of initiative practicality, and (e) administration commitment to the innovation and professional development for the implementation of the innovation (p. 207-208). Scales to measure practitioner, organizational, and community readiness are being developed. The Organizational Social Context is a 105-item measure of organizational culture, climate, and work attitudes (Glissen, Green, & Williams, 2012). The Implementation Climate Scale is an 18-item rating scale which measures shared perceptions of employees of policies, practices, procedures, and behaviors, with subscales

that include perception of the organizations focus on EBPs, training support for EBPs, recognition for EBPs, reinforcements for EBPs, selection for EBPs, and selection for openness of EBPs (Ehrhart, Aarons, & Farahnak, 2014; Frambach, & Schillewaert, 2002). The Implementation Leadership Scale is a 12-item rating scale developed to assess organizational leadership behavior, with four subscales that assess employee perception and individual leader self-perception of knowledge of EBPs and implementation challenges, support for EBP adoption, proactive behaviors associated with anticipation for implementation challenges, and perseverant responses to challenges of EBP implementation (Aarons, Farahnak, & Ehrhart, 2014). Individual readiness has been measured with the use of the EBPAS by Aarons (2004) and is described in more detail below.

Attitudes. The attitude of individuals within an organization influences their likelihood to engage in the implementation of an EBP. The definition of attitude has been accepted in research to include three-components: (a) affective, (b) cognitive, and (c) behavioral (Greenwald, 2014, p. 5). Krech, Ballachey, and Crutchfield (1962) explained that "attitudes [are] enduring systems of positive or negative evaluations, emotional feelings, and pro or con action tendencies with respect to social objects" (p. 139). The following studies have examined attitude relative to the adoption of EBPs.

Gaughan (2008) conducted a mixed-methods sequential exploratory research design study regarding the use of EBPs by special education teachers within rural Massachusetts public schools. The first phase of the study was quantitative and included an online survey that gathered information about the participants' educational and

teaching background, general and specific knowledge of EBPs, barriers to implementing EBPs, and attitudes regarding EBPs. In the second phase, qualitative data were gathered through semi-structured interviews in a non-experimental descriptive case study using questions constructed by data gathered during the first phase and a review of randomly selected individualized education program plans for evidence of EBP design and implementation.

Gaughan (2008) found that special education teachers have a high regard for EBPs and believe EBPs should be a part of their practice, EBPs improve student outcomes, and being familiar with educational research is an important professional responsibility (p. 114-115). Additionally, the study developed a profile of special educators who were most likely to use EBPs. Such teachers shared the following characteristics: (a) membership in professional organizations, (b) experience with college professors who incorporated research findings into their courses, (c) confidence in one's ability to conduct literature searches and apply research to their practices, and (d) had adequate time to spend in the consumption of literature (p. 117). Gaughan also indicated that the most significant barrier to implementation of EBPs was time (p. 118). Factors impinging on special education teachers' time included caseloads, evaluations, and paperwork associated with writing individual education programs for students with disabilities (p. 118).

Specifically studying attitude, Aarons (2004) developed the EBPAS, which incorporates four domains of attitudes that affect implementation of EBPs. The first is the intuitive appeal of a new practice, where practitioners are more accepting of innovations

learned from colleagues rather than from researchers or academic studies (p. 2). Second is the individual's compliance response to organizational requirements to adopt new practices (p. 3). Third is openness to change, marked by the practitioner's willingness to attempt to implement or consider implementing innovative practices (p. 3). Finally, practitioners' skepticism of evidence-based protocols may lead to a divergence of perceived necessity for implementation for anything but the current practices (p. 3). The EBPAS utilizes a 5-point Likert scale for each of 15 questions, which are subscaled into each of the domains described above. Findings from the study identified that attitudes toward adoption of EBPs can be measured among mental health providers (p. 10). Another finding was that the more recent the practitioner's formal training experience, the more willing they were to adopt EBPs (p. 10). Additionally, higher levels of educational attainment was associated with positive attitudes toward EBP adoption (p. 10). Cross discipline differences toward adoption of EBPs were not significant (p. 11). The importance of the EBPAS is that it created a unique standardized measure of attitudes toward EBPs, which can be adapted for use among other disciplines, such as education. Utilization of the EBPAS can provide a quick assessment of practitioner willingness to implement research- or evidence-based practices, which can be used by organizational leadership to determine how to engage practitioners in the adoption EBPs.

Theoretical Framework

Social learning theory. Social learning theory (SLT), as identified by Bandura and Walters (1977), describes learning through observing behavior of a model in a group

context (p. 37) and is important to how individuals acquire skills associated with adoption of EBPs. Rather than rely solely on a behaviorist view that behavior is learned by external factors associated with trial and error and external reinforcers, Bandura and Walter (1977, p. 2) argued that there are cognitive processes involved, which interact with environmental factors. Four meditational processes influence whether the behavior observed will be learned and repeated, which include attention to the behavior being demonstrated, retention of the information contained in the behavior, reproduction capabilities of the observer, and motivation of the observer to reproduce the behavior (Bandura & Walters, 1977). Of the four meditational processes, reproduction, or the belief that an individual has in them to perform a task based on physical and mental ability, is the basis for self-efficacy (Bandura, 1999, p. 169). Motivation to change behavior is driven in part by a person's self-efficacy, which increases with perceived success of task accomplishment (Bandura, 1982). The processes of self-efficacy and motivation are important to the acquisition of new behaviors or new practices, since the origin of the new practice can influence the decision to attempt a new practice. Dunn et al. (2013) related SLT to teacher efficacy and their learning through observation and collegial collaboration around teacher data-driven decision making leading to improved student learning outcomes.

In relation to SLT, Blase et al. (2015) argued that at least in part, the staff selection process should include role-play and vignette observation to identify an individual's (a) ability to respond to challenging behavior of adults and children, (b) willingness to discuss their own behavior, (c) question others to understand their

respective concerns, and (d) willingness to accept feedback from others. The dynamics of social learning is represented by the individual's ability to reproduce the modeled behavior, which interacts with their motivation to engage in the activities and the observers' feedback for improvement. In the context of SLT, the individual's motivation by their responsiveness to and skill acquisition for implementation of EBPs were being assessed. In relationship to attitude, motivation to perform a new task, at least in part, may be related to one's acceptance of the new task if demonstrated by a colleague (Bandura, 1988).

Integrated theory of change. Theory of change has also been identified as theory-driven evaluation, program-theory evaluation, theory-based evaluations, theory-guided evaluation theory-of-action, program logic, logical frameworks, outcomes hierarchies, and realist or realistic evaluation (Coryn, Noakes, Westin & Schröter, 2011). It is a process where individuals within a system identify long-term goals and benchmark conditions signaling goal fulfillment (Taplin & Clark, 2012). Following the back-mapping of long-term goals, requisite existing indigenous system resources are identified, interventions are selected, outcome progress indicators are developed, and the quality plan is reviewed for plausibility, feasibility, and testability, and then the logic plan is summarized (Taplin & Clark, 2012).

The NIRN utilizes a theory of change protocol in its application of fidelity assessments, which measure the outcome of a newly implemented EBP within a school system (Blase et al., 2015, p. 16). The application of a fidelity assessment asks questions targeting implementation drivers associated with intervention, including organizational,

leadership, and competency components (pp. 16-17). Properly applied fidelity assessments will identify areas for improvement, should shortcomings be identified (p. 16). As competency drivers are assessed, key fidelity of implementation aspects of staff, training, and coaching can be targeted for improvement (p. 17). Incorporating attitude assessment into the fidelity assessment, or even earlier in the implementation scheme, will assist in staff and training need selection for improvement of all phases of implementation.

Discourse theory. There are many reasons why teachers resist EBSs at the teacher practitioner level. This resistance has been studied in part by Smith, Schmidt, Edelen-Smith, and Cook (2013) through discourse theory. Discourse theory, as described by Gee (1989), recognizes that a portion of language is made up words, which is considered the *small d* discourse. The entirety of language, however, includes non-verbal cues, such as attire, mannerisms, voice tone, values, and beliefs, which comprise *capital D*, and in discourse helps form an identity within a community (pp. 6-7). Communities identify themselves apart from others through their discourses, and community members can recognize who belongs to their discourse community and who are on the outside (p. 7).

Smith et al. (2013) suggested that educational researchers and practitioners are separated by their respective discourse community identities, the former lacking credibility with the latter and the latter lacking authority with the former (pp. 149-150). Educational researchers tend to accept education practitioner knowledge or insight as untested and, therefore, less credible, resulting in a form of elitism stemming from the

belief that researchers hold the truth and practitioners must learn that truth from them (Davis, 2007, p. 570).

Practitioner discourse communities tend to distrust researchers, since they believe data can be manipulated in whatever way is necessary to prove the researcher's hypothesis (Smith et al., 2013, p. 150). Additionally, practitioners identify and resent an exclusion of their participation in research, giving rise to a discourse community of practitioners who reject their rejecters (Castells, 2011, p. 9), which is observed in the education practitioner community in their rejection of researcher promoted evidence-based practices (Smith et al., 2013). Antagonism between these discourse communities persists, as the research community promotes EBP and the practitioner community demands practice-based evidence (p. 150). This antagonism leads to the formation of resistant attitudes associated with adoption of EBPs, yet research investigating and measuring the attitudes has been limited, particularly with educator practitioners.

Summary

The purpose of this study was to measure teacher attitudes toward the implementation of EBPs, with the aim of determining what technical assistance is needed as schools are compelled to adopt these practices. The literature reviewed included an overview of implementation science, teacher self-efficacy, technical and adaptive change, levels of technical assistance, readiness and implementation stages, attitudes toward EBPs, and the theoretical frameworks of social learning theory, integration theory of change, and discourse theory.

Adoption of EBPs has been shown to be slow across disciplines (Helms, 1991; Rogers, 1995). The relatively new field of implementation science (Eccles & Mittman, 2006) has brought insight into the causes of implementation delay, strategies to overcome these delays, and guidelines that assure fidelity when EBPs are adopted. Within education, there exists a significant gap of achievement between children with disabilities and children without disabilities. The federal government, which has been providing special education funding to address this gap, is now requiring states and local school districts to close the gap by selecting and implementing evidence-based reforms (Delisle & Yudin, 2014).

Implementation science has found several factors to influence adoption and sustaining EBPs. Literature reviewed included not only studies and protocol for scaling up of EBPs, but individual teacher factors, such as teacher self-efficacy, technical and adaptive change models, the levels of technical assistance needed to facilitate change, individual practitioner attitude toward EBPs, and the theoretical frameworks of social learning, integration theory of change, and discourse theory.

The connection between individual teacher self-efficacy, the implementation driver of staff competence, and the willingness to adopt EBPs can be measured by the EBPAS. The resulting information can be utilized in determining the level of technical assistance, ranging from basic technical assistance to intensive technical assistance. The following chapter will discuss the design and method of measuring teacher attitudes toward adoption of EBPs.

Chapter III

Research Design and Methodology

Purpose

The purpose of this study was to examine the relationship between personal characteristics and attitudes toward EBPs of regular education and special education teachers in Wisconsin public schools. Wisconsin's public education system is divided into 12 regions, identified as Cooperative Educational Services Agencies (CESAs). Furthermore, each CESA in Wisconsin encompasses a specific number of Wisconsin public school districts. The scope of the study was limited to public schools within the CESA 9 region. The CESA 9 (2017) 2016-2017 annual report states that there were 33,847 students enrolled in the 21 school districts within the region (p. 4). Moreover, there are 102 school buildings, an average school district student population of 1,539 (ranging from 145 students in the smallest district to 8,405 in the largest district), and an average of 332 students per school building (p. 4). Personal characteristics of special and regular education teachers were collected, including (a) years of teaching experience, (b) years teaching in their current school, (c) years teaching in their current position, (d) student population, (e) age, and (f) educational attainment. Data regarding teacher willingness to adopt EBPs were also collected using as standardized measure of attitudes towards adoption of EBPs. The demographic information collected was important to the study in order to identify personal and professional characteristics and factors that contribute to a willingness to adopt EBPs.

Problem Statement

A lag in adoption of EBPs is evident in nearly every field of practice, including disciplines such as agriculture, medicine, mental health, economics, and teaching (Aarons, 2004). Educators are faced with new accountability standards that demand school improvement, necessitating adoption of innovative techniques and/or EBPs to address achievement gaps (Delisle & Yudin, 2014). Implementation of EBPs often starts off energetically, but often fails to become an established practice that is sustained with fidelity (Adelman & Taylor, 2003; Fixsen et al., 2010), which may, in part, be influenced by attitudes held by practitioners (Aarons, 2004).

Research Questions

1. What are teacher attitudes toward evidence-based practices?
2. Are there relationships between individual teacher personal characteristics that correlate with personal and professional attitudes?

Research Hypotheses

1. There is a relationship between age of teachers and a willingness to adopt evidence-based practices.
2. There is a relationship between educational attainment and a willingness to adopt evidence-based practices.

3. There is a relationship between number of years of service and a willingness to adopt evidence-based practices.
4. There is a relationship between the number of years of service teaching in a current school and a willingness to adopt evidence-based practices.
5. There is a relationship between number of years of service in one teaching position and a willingness to adopt evidence-based practices.
6. There is a relationship between the number of students in a school and a willingness to adopt evidence-based practices.

Research Methodology

A survey study methodology was used in this study. A survey was administered to a defined set of educators utilizing a convenience sampling of respondents from within the northcentral region of Wisconsin. A survey is a tool used to collect data from a target population and statistics produced from the data (Fowler, 2013). Survey research generally involves collection of data on peoples' opinions about issues or topics affecting them (Gay, Mills, & Airasian, 2009). Surveys are commonly used, easily understood by respondents, and generally accepted as a practical way of gathering data within the education environment (Wiersma & Jurs, 2009).

The survey tool used in this study was a self-administered questionnaire. The advantages of using a questionnaire include cost and efficiency for collection of data when the sample population is numerous and geographically expansive and convenient for respondents and for respondent confidentiality (Gall, Gall, & Borg, 2007). Gall et al.

(2007) stated that attitudinal questionnaires need to have at least 10 items to ensure reliability, and when possible, researchers should utilize previously developed instruments.

Web-based questionnaires are now common and have advantages in design and administration over paper and pencil forms: there are no postal costs, missing data can be eliminated, data can be transferred directly into data manipulation software systems for analysis, data transfer errors can be eliminated, and enhanced anonymity since data do not physically transfer outside of the Web-server and facilitating software (Gall et al., 2007). Web-based questionnaires also offer ease of survey completion for respondents (Wiersma & Jurs, 2009). For the reasons mentioned, a descriptive research methodology was used in this study. Demographic survey items were merged with a previously researched instrument that measures attitudes toward EBPs.

Instrumentation

The EBPAS was developed to assess attitudes of child and adolescent mental health service providers toward adoption of EBPs (Aarons, 2004). Permission to use the EBPAS was obtained from the original author, then adapted for use in this study with teachers to measure their attitude toward adoption of EBPs. Adaptations included substituting the word *therapy* with *methods*, *treatment* with *teaching/training*, *clients* with *students*, and *clinically useful* with *useful in practice*. The EBPAS is composed of 15 items, each rated on a 5-point Likert scale, ranging from *not at all* (0) to *to a very great extent* (4) (Aarons, 2004; Aarons et al., 2010; Aarons, McDonald, Sheehan, &

Walrath-Greene, 2007). The EBPAS has four domain subscales: appeal (measuring the intuitive appeal of EPBs, requirements (assessing the likelihood of adopting EBPs given requirements to do so), openness (measuring openness to new practices), and divergence (assessing perceived divergence between research-based/academically developed interventions and current practice; Aarons, 2004).

Items for the EBPAS were initially developed from reviews of literature, consultation with mental health service providers, and consultation with mental health services researchers (Aarons, 2004). Subsequent content validity of the EBPAS was established by ratings from an expert panel of six mental health services researchers, who rated each item for (a) relevance in assessing attitudes toward EBPs, (b) importance in assessing attitudes toward EBPs, and (c) representativeness of the particular factor that the item is attempting to assess. Ratings were assigned using a 5-point Likert scale: *not at all relevant* (1), *relevant to a slight extent* (2), *relevant to a moderate extent* (3), *relevant to a great extent* (4), *relevant to a very great extent* (5) (Aarons et al., 2010).

Internal consistency and predictive reliability for the EBPAS was computed using the Cronbach's alpha coefficient analysis (Aarons, 2004; Aaron et al., 2007; Aarons et al., 2010). The Cronbach's alpha coefficient is defined as "a measure of the internal consistency of a test containing items that are not scored dichotomously, based on the extent to which test-takers who answer a given test item one way respond to other items in a similar way" (Gall et al., 2007, p. 637). The Cronbach's alpha coefficients range from 0 to 1, where coefficients approaching 1.0 show greater internal consistency. Qualitative descriptors of Cronbach's alpha reliability coefficients are unacceptable if

below .5; poor, if greater than .5 but less than .6; questionable, if greater than .6 but less than .7; acceptable, if greater than .7 but less than .8; good, if greater than .8 but less than .9; and excellent, if .9 or greater (George & Mallery, 2003, p. 231).

The most recent study of the EBPAS suggests an acceptable level of predictive reliability for the overall total factor scale (Cronbach's alpha = .76) (Aarons et al., 2010). Requirements, described as the indicator of how likely a new practice would be adopted by a practitioner if it were required by an agency, supervisor, or state, has a good predictive reliability (Cronbach's alpha = .91) (p. 358). The subscale of appeal, described as the likelihood a practitioner would adopt a practice, if it makes sense (p. 359), could be used correctly, or it is being used by others who find it agreeable, has a good level of predictive reliability (Cronbach's alpha = .85) (p. 358). The openness subscale, relating to how open a practitioner generally is toward attempting new interventions and willingness to try new practices, has a good level of reliability (Cronbach's alpha = .84) (p. 358). The divergence subscale, the practitioner's view of research-based interventions as less important than clinical experience, has a questionable level of predictive reliability (Cronbach's alpha = .67) (p. 358).

The EBPAS has been used in other studies to examine how practitioner attitudes affect adoption of EBPs in many other fields. Aarons et al., (2010) stated,

> Although the EBPAS is relatively new, it is being used across the United States and internationally, as evidenced by requests for the measure from the first author. Permission to use the EBPAS has been provided for over 50 research and evaluation studies in the United States, and requests for the EBPAS have come

> from investigators in other countries including Iran, Israel, Japan, Korea, Norway, Romania, and Sweden (p. 357).

Although the EBPAS has yet to be subjected to the same standardization procedures with educators as it has been with mental health providers, Stahmer and Aarons (2009) conducted a comparison study between education-based early intervention providers and clinic-based mental health providers. Education-based early intervention providers included teachers, early childhood educators, and developmental or behavior specialists providing services to children 0 to 3 years old diagnosed with autism spectrum disorders (p. 226). Results indicated generally more positive attitudes among education-based early intervention providers toward adoption of EBPs as compared with clinic-based mental health providers (p. 228). A proposal for a yet to be published study is underway to establish the psychometric properties of the EBPAS and attitudes of a narrow group of public school educators toward EBPs, specifically, general educators, special educators, and principals serving children with autism spectrum disorders in kindergarten through grade three (Locke et al., 2016). Although the reliability and validity of the EBPAS in assessing attitudes of practitioners toward adoption of EBPs are being expanded, it is currently the only uniquely applicable measure of attitude and readiness available to assess attitudes of teachers toward adoption of EBPs within the education environment.

For this study, data were collected using the research-validated and published instrument EBPAS, paired with a series of demographic questions (see Appendix A). The instrument and survey were administered through Google Forms and distributed via email to building administrators, who then forwarded the email to individual teachers.

The instrument was completed by participants in a location of their choosing, wherever they may have had access to a computer and email.

Teacher demographic survey questions preceded the EBPAS. Regular education teaching position questions required identification of grade-level assignment. Special educator teaching positions required identification of learning disabilities, intellectual disabilities, emotional behaviorally disturbed, cross categorical, or autism assignment. Experience in teaching selection ranged sequentially between one and 40 years of service, with an option to select more than 40, if applicable. Current school experience included a selection range sequentially between one and 40 years of service, with an option to select more than 40, if applicable. Current position experience included a selection range sequentially between one and 40 years of service, with an option to select more than 40, if applicable. Participant age was requested. Participant educational attainment was identified as bachelors', masters', or doctorate.

Data Collection Method

Superintendents from the CESA 9 region were presented with a description of the study at a regularly scheduled regional meeting at the CESA 9 office, wherein superintendent permission to survey teachers and commitment to participate were obtained in writing (see Appendix B). Superintendents not in attendance were contacted for a personal meeting in an effort to secure their participation. Participating superintendents or their designees forwarded an email from the researcher to 4K through Grade 8 regular and special education teachers containing a recruitment statement,

confidentiality statement, and a hyperlink to the electronic demographic survey and EBPAS instrument (see Appendix A). Superintendents were asked to notify the researcher when they or their designee had forwarded the email to 4K through Grade 8 teachers in their respective districts. Within five days of the initial request, superintendents or their designees who had not notified the researcher regarding participation were contacted to verify whether they had followed through in sending the survey to their respective teachers. Data were collected over specified 3-week period of time during the last month of the 2016-2017 school year from participating in school districts.

Participant Sample

The methodology for this study was a convenience sampling of Pre-K through Grade 8 regular and special education classroom teachers in the CESA 9 region. Convenience sampling can be used by researchers when there is risk of being unable to conduct the study, the sample is near the researcher's work, the permitting administrator(s) are familiar with the researcher, or the researcher is familiar with the site or has a connection with the work within the site(s) (Gall et al., 2007). Gall et al. (2007) state that, although random sampling is preferred, inference for generalization of the findings can be enhanced by clearly describing the sample (p. 175).

The sample population was determined by consulting each webpage of the 21 school districts in the CESA 9 region containing staff rosters. There were approximately 892 4K through Grade 8 regular education classroom teachers and 204 4K through Grade

8 special education classroom teachers within CESA 9; all were identified as potential participants. Of the 21 potential participant districts, eight were represented by respondents from a pool of 361 4K through Grade 8 regular education classroom teachers and 87 4K through Grade 8 special education classroom teachers.

Data Analysis

Data analysis included frequency distribution, descriptive statistics, and correlation analysis to examine the association of EBPAS subscale and total scores with provider demographic characteristics. The software IBM Statistical Package for the Social Sciences (SPSS) was used to generate descriptive statistics, including mean and standard deviations, of the respondent groups of regular educators and special educators, which included independent variables: (a) years of teaching experience, (b) years of teaching experience in current school, (c) years of teaching experience in current position, (d) student population size, (e) age, and (f) educational attainment. The SPSS was also used to generate correlational data using the Pearson correlation coefficients (r) for each independent variable and each of the subscale and total scale scores from the EBPAS: (a) requirement, (b) appeal, (c) openness, (d) divergence, and (e) total score. Pearson correlation coefficients were used to determine the strength of the relationship or effect size of each independent variable on each subscale and overall scale score (Field, 2009).

Summary

The purpose of this chapter was to describe the research methodology, data collection procedures, the instrument of data collection, the statistical procedures for data analysis, as well as research support and rationale for each. Teacher attitudes toward EBPs were assessed through the use of a previously developed and research-validated measure of attitudes and use of a descriptive and correlational methodology in exploring the relationship between individual demographic data collected and attitudes of teachers toward EBPs measured by the EBPAS. Subjects for the study were included by convenience sampling from a defined region in northcentral Wisconsin.

CHAPTER IV

Research Findings and Analysis

Introduction

Like other disciplines, such as agriculture, medicine, mental health, and economics, education lags in the adoption of innovative practices. The purpose of this study was to identify the attitudes of teachers toward adopting EBPs for teaching students. Factors shown to be associated with adoption of EBPs by mental health providers include adopting EBPs when required by superiors, when the practice appears appealing, when the practitioner has openness to innovation, and when the practitioner does not resist innovation (Aarons, 2004). Demographic factors influencing attitudes toward adoption of EBPs, as studied by Aarons (2004), included age, years of experience, and educational attainment. The outcome of the study was the development of a survey that measured a practitioner's willingness to adopt EBPs with the four subscales of requirements, appeal, openness, and divergence named in the EBPAS (Aarons, 2004). This chapter includes a description of data collection procedures, including solicitation of school district and individual participation, the survey and instrument, the participants, and data as collected, along with their analysis.

Descriptive Statistics

Superintendents from 21 school districts in the CESA 9 region were presented with this study's purpose and procedures during a regularly scheduled regional meeting

held at the CESA 9 office in Tomahawk, Wisconsin. Eight school districts participated in the study, which included 361 regular educators and 87 special educators, for a total of 448 potential participants. Districts ranged from 11 to 222 total potential teacher participants. The average number of teachers across the eight participating districts was 56. The range of district regular education potential teacher participants across eight districts was nine to 190, and the range of district special education potential teacher participants across eight districts was two to 32. The average number of regular education potential teacher participants across eight districts was 45.13, and the average number of special education potential teacher participants across districts was 10.88 (see Table 1).

Table 1

CESA 9 Region School District Elementary Regular and Special Education Teacher Populations

School District	Regular	Special Education	Total
District 1	9	2	11
District 2	50	25	75
District 3	21	4	25
District 4	30	10	40
District 5	24	6	30
District 6	17	4	21
District 7	20	4	24
District 8	190	32	222
Total	361	87	448

Note. Regular = regular education teachers; Special Education = special education teachers

The 15-item EBPAS was administered in conjunction with seven demographic questions associated with teaching position designation, age, years of teaching experience, years of teaching in current position, years of teaching in current school, size of school, and level of educational attainment. A total of 94 participants responded to this survey. Of the 94 respondents, 16 were specialist educators, including music teachers,

interventionists, guidance counselors, speech/language therapists, gifted/talented instructors, and English Language Learner teachers, all of who were excluded from the data analysis.

Regular education teacher distribution. Of the 78 educators included in the data analysis, 60 regular education teachers were included in the data analysis. The average number of regular education teacher respondents across 17 grade level options was 3.76, and 4.27 across 15 grade level options, excluding Grade 6 and Grade 7, which had no respondents (see Table 2).

Table 2

Regular Education Teacher Distribution

Current Teaching Position	Number of Respondents
Not specified	4
4K	1
5K	6
Grade 1	9
Grade 2	7
Grade 3	7
Grade 4	10
Grade 5	3
Grade 6	0
Grade 7	0
Grade 8	2
5K – Grade 1	1
5K – Grade 5	1
Grades 6 & 7	2
Grades 7 & 8	3
Grades 6 – 8	4
Total	60

Note. 4K = 4-year-old Kindergarten; 5K = 5-year-old Kindergarten

Special education teacher distribution. Of the 78 respondents included in the data analysis, 18 were special educators. The average number of special education teacher respondents across 12 category options was 1.58 (see Table 3).

Table 3

Special Education Teacher Distribution

Current Teaching Position	Number of Respondents
LD, no grade designated	3
EBD, no grade designated	2
Cross Categorical, no grade designated	3
LB, EBD, ID, and Cross Categorical, no grade designated	1
Cross Categorical, Grades 1, 2, 3, 5	1
Cross Categorical, Grades 4, 5	2
Cross Categorical, Grades 6 – 8	1
Cross Categorical & Autism, Grades 2, 3, 4, 5	1
ID, Cross Categorical, and Autism, no grade designated	1
All categories, PreK, EC, and 5K	1
All categories, Grades 6 – 8	1
LK, ED, ID, and Cross Categorical, Grades 5K – 5	1
Total	18

Note: LD = Learning Disabilities; EBD = Emotional Behavioral Disabilities; ID = Intellectual Disabilities; All Categories = LD, EBD, ID, Autism

Regular educator years of teaching distribution. Of the 60 regular education teacher respondents, the majority (53%) had been teaching 16 years or more, where the highest concentration within this group was 21 to 25 years (22%). For participants with 15 years or fewer years of teaching (47%), the highest concentration within this group was 23% with five or fewer years of teaching (see Table 4).

Table 4

Regular Educator Years of Teaching Distribution

Years of Teaching	Number of Respondents
0 – 5	14
6 – 10	7
11 – 15	7
16 – 20	11
21 – 25	13
26 – 30	8
Total	60

Special educator years of teaching distribution. Of the 18 special educators, the majority (72%) had been teaching 20 years or less, with the highest concentration within this group with five years or less at 33% of the total. For participants with 21 years or more teaching (28%), the highest concentration within this group were those with 26 to 30 years (11%) of teaching (see Table 5).

Table 5

Special Educator Years of Teaching Distribution

Years of Teaching	Number of Respondents
0 – 5	6
6 – 10	3
11 – 15	2
16 – 20	2
21 – 25	1
26 – 30	2
31 – 35	1
36 – 40	1
Total	18

Regular education teacher school size distribution. Of the 60 regular education teacher respondents, the majority (87%) had been teaching in schools with 500 students or less, where the highest concentration within this group was with 401 to 500 students or 23% of the total. For participants who had been teaching in schools with 501 or more students (13%), the highest concentration within this group were those teaching in schools with 501 to 600 students or 8% of the total (see Table 6).

Table 6

Regular Education Teacher School Size Distribution

School Size (student enrollment)	Number of Respondents
0 – 100	6
101 – 200	10
201 – 300	12
301 – 400	10
401 – 500	14
501 – 600	5
601 – 700	2
701 – 800	0
801 – 900	0
More than 1,000	1
Total	60

Special education teacher school size distribution. Of the 18 special education respondents, the majority (100%) had been teaching in schools with 501 or less students or less, where the highest concentration within this group was with 301 to 400 students, which was 33% of the total. There were no special education participants who had been teaching in schools with 501 and more students (see Table 7).

Table 7

Special Education Teacher School Size Distribution

School Size (student enrollment)	Number of Respondents
0 – 100	1
101 – 200	3
201 – 300	4
301 – 400	6
401 – 500	4
501 – 600	0
601 – 700	0
701 – 800	0
801 – 900	0
More than 1,000	0
Total	18

Regular education teacher age distribution. Of the 60 regular education respondents, the median age was 43 years, with the highest frequency of age falling in the 46 to 50 year category (see Table 8).

Table 8

Regular Education Teacher Age Distribution

Age Range	Number of Respondents
21 – 25	2
26 – 30	8
31 – 35	6
36 – 40	8
41 – 45	10
46 – 50	11
51 – 55	8
56 – 60	7
61 – 65	0
Total	60

Special education teacher age distribution. Of the 18 special educators, the median age was 43 years, with the highest frequency of age falling in the 46 to 50 year category (see Table 9).

Table 9

Special Education Teacher Age Distribution

Age Range	Number of Respondents
21 – 25	1
26 – 30	2
31 – 35	2
36 – 40	2
41 – 45	3
46 – 50	4
51 – 55	2
56 – 60	1
61 – 65	1
Total	18

Regular education teacher educational attainment distribution. Of the 60 regular education respondents, 40% held bachelor's degrees and 60% held master's degrees (see Table 10).

Table 10

Regular Education Teacher Educational Attainment Distribution

Highest Degree Held	Number of Respondents
Bachelor's	24
Master's	36
Total	60

Special education teacher educational attainment distribution. Of the 18 special education respondents, 56% held bachelor's degrees and 44% percent held master's degrees (see Table 11).

Table 11

Special Education Teacher Educational Attainment Distribution

Highest Degree Held	Number of Respondents
Bachelor's	10
Master's	8
Total	18

Regular education years in current school distribution. Of the 60 regular education teachers, the majority (88%) had been teaching in their current schools 20 years or less, where the highest concentration within this group was five years or less, with 48% of the total. For participants with 21 years or more teaching in their current schools (47%), the highest concentration within this group were those with 21 to 25 years of teaching in their current school, with 8% of the total (see Table 12).

Table 12

Regular Educator Years in Current School Distribution

Years in Current School	Number of Respondents
1 – 5	29
6 – 10	6
11 – 15	7
16 – 20	11
21 – 25	5
26 – 30	1
31 – 35	1
36 – 40	0
Total	60

Special educator years in current school distribution. Of the 18 special education teachers, the majority (89%) had been teaching in their current school 20 or less, where the highest concentration within this group was five years or less, with 56% of the total. For participants with 21 years or more of teaching in their current school (11%), the highest concentration within this group were those with 21 to 25 years of teaching in their current school, with 11% of the total (see Table 13).

Table 13

Special Educator Years in Current School Distribution

Years in Current School	Number of Respondents
1 – 5	10
6 – 10	2
11 – 15	2
16 – 20	2
21 – 25	2
26 – 30	0
31 – 35	0
36 – 40	0
Total	18

Regular education years in current position distribution. Of the 60 regular education teachers, the majority (72%) had been teaching in their current position 20 years or less, where the highest concentration within this group was five years or less, with 53% of the total. For participants with 21 years or more teaching in their current position (8%), the highest concentration within this group were those with 21 to 25 years of teaching in their current school, with 7% of the total (see Table 14).

Table 14

Regular Educator Years in Current Position Distribution

Years in Current Position	Number of Respondents
1 – 5	32
6 – 10	3
11 – 15	1
16 – 20	7
21 – 25	4
26 – 30	1
31 – 35	0
36 – 40	0
Total	60

Special education years in current position distribution. Of the 18 special education respondents, the majority (67%) had been teaching in their current position 20 years or less, where the highest concentration within this group was five years or less, with 67% of the total. For participants with 21 years or more teaching in their current position (11%), the highest concentration within this group were those with 21 to 25 years of teaching in their current school, with 11% of the total (see Table 15).

Table 15

Special Educator Years in Current Position Distribution

Years in Current Position	Number of Respondents
1 – 5	12
6 – 10	2
11 – 15	1
16 – 20	1
21 – 25	2
26 – 30	0
31 – 35	0
36 – 40	0
Total	18

The mean number of years teaching for all participants (*N*=78*)* was 15.21, with a standard deviation of 9.79. The mean number of years teaching at their current school for all participants (*N*=78) was 9.21, with a standard deviation of 8.30. The mean number of years teaching in their current position for all participants (*N*=78) was 7.73, with a standard deviation of 7.23. The mean student population of schools where all participants (*N*=78) taught was between 201 and 400, with a standard deviation of 0 to 200 students. The mean age of all participants (*N*=78) was 42.58, with a standard deviation of 10.16.

The mean number of years teaching for regular education participants (*n*=60) was 15.53, with a standard deviation of 9.83. The mean number of years teaching at their current school for regular education participants (*n*=60) was 9.83, with a standard deviation of 8.45. The mean number of years teaching in their current position for regular education participants (*n*=60) was 8.15, with a standard deviation of 7.27. The mean student population of schools where regular education participants (*n*=60) taught was between 201 and 400, with a standard deviation of 0 to 200 students. The mean age of regular education participants (*n*=60) was 42.53, with a standard deviation of 10.01.

The mean number of years teaching for special education participants (*n*=18*)* was 14.11, with a standard deviation of 11.71. The mean number of years teaching at their current school for special education participants (*n*=18) was 7.11, with a standard deviation of 7.64. The mean number of years teaching in their current position for special education participants (*n*=18) was 6.33, with a standard deviation of 7.15. The mean student population of schools where special education participants (*n*=18) taught was between 201 and 400, with a standard deviation of 0 to 200 students. The mean age of

special education participants (*n*=18) was 42.72, with a standard deviation of 10.96. See Table 16 for full descriptive statistics.

Table 16

Descriptive Statistics

Current Position	Descriptor	Mean	SD
Regular Education (*n*=60*)*	EBPAS total score	2.81	0.46
	Years of teaching	15.53	9.22
	Years at current school	9.83	8.45
	Years at current position	8.15	7.27
	Student population*	3.77	1.80
	Age	42.53	10.01
Special Education (*n*=18)	EBPAS total score	2.79	0.43
	Years of teaching	14.11	11.71
	Years at current school	7.11	7.64
	Years at current position	6.33	7.15
	Student population*	3.50	1.20
	Age	42.72	10.96
Total (*N*=78)	EBPAS total score	2.80	0.45
	Years of teaching	15.21	9.79
	Years at current school	9.21	8.30
	Years at current position	7.73	7.23
	Student population*	3.71	1.68
	Age	42.58	10.16

* Student Population: 0 – 1 = 0 to 100, 1.1 – 2 = 101 to 200, 2.1 – 3 = 201 to 300, 3.1 – 4 = 201 to 400, 4.1 – 5 = 401 to 500, 5.1 – 6 = 501 to 600, 6.1 – 7 = 601 to 700, 7.1 – 8 = 701 to 800, 8.1 – 9 = 801 to 900, 9.1 – 10.0 = 901 to 1000, 10.1 = 1000+

Total EBPAS scaled scores. Of the 60 regular education teacher respondents, a majority were either *to a moderate extent* (63%) or *to a great extent* (33%) likely to adopt EBPs. Only 3% of regular educators were open to adopting EBPs *to a slight extent.* Overall, regular educators were *to a moderate extent* open to adoption of EBPs, as indicated by their mean EBPAS score of 2.81 (see Table 17).

Of the 18 special education respondents, a majority was either *to a moderate extent* (78%) or *to a great extent* (16%) likely to adopt EBPs. Six percent of special

educators were open to adopting evidence-based practices *to a slight extent*. Overall, special educators were *to a moderate extent* open to adoption of EBPs, as indicated by their mean EBPAS score of 2.81 (see Table 17).

Table 17

Total EBPAS Scaled Scores

Position	0.0 – 0.9*	1.0 – 1.9*	2.0 – 2.9*	3.0 – 3.9*	4.0*	Mean
Regular Educators	0	2	38	20	0	2.81
Special Educators	0	1	14	3	0	2.78

*0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent*.

Requirement scaled scores. Of the 60 regular education teacher respondents, a majority were *to a moderate extent* (21%), *to a great extent* (30%), or *to very great extent* (30%) likely to adopt EBPs when required to do so by agency requirements. Thirteen percent of regular educators were *to a slight extent* open to adopting EBPs when required to do so by agency requirements, and the remaining 5% would not adopt EBPs at all when required to do so by their agency. Overall, regular educators were *to a moderate extent* open to adoption of EBPs, as indicated by their mean EBPAS score of 2.75 (see Table 18).

Of the 18 special education respondents, a majority were *to a moderate extent* (28%), *to a great extent* (50%), or *to a very great extent* (17%) likely to adopt EBPs when required to so by their agency. Six percent of special educators were open to adopting EBPs *to a slight extent* when required to do so by their agency. Overall, special educators were *to a moderate extent* open to adoption of EBPs, as indicated by their mean requirement score of 2.70 (see Table 18).

Table 18

Requirement Scaled Scores

Position	0.0 – 0.9*	1.0 – 1.9*	2.0 – 2.9*	3.0 – 3.9*	4.0*	Mean
Regular Educators	3	8	13	18	18	2.75
Special Educators	0	1	5	9	3	2.70

*0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Appeal scaled scores. Of the 60 regular education teacher respondents, a majority were *to a moderate extent* (12%), *to a great extent* (60%), or *to very great extent* (11%) likely to adopt EBPs when there is an intuitive appeal. One percent of regular educators were *to a slight extent* open to adopting EBPs when there is an intuitive appeal. Overall, regular educators were open to adoption of EBPs *to a great extent* when there is an intuitive appeal, as indicated by their mean appeal score of 3.12 (see Table 19).

Of the 18 special education respondents, a majority was *to a moderate extent* (28%), *to a great extent* (61%), or *to a very great extent* (5%) likely to adopt EBPs when there is an intuitive appeal. Five percent of special educators were *not at all* open to adopting EBPs when there is an intuitive appeal. Overall, special educators were open to adoption of evidence-based practices *to a great extent*, as indicated by their mean appeal score of 3.08 (see Table 19).

Table 19

Appeal Scaled Score

Position	0.0 – 0.9*	1.0 – 1.9*	2.0 – 2.9*	3.0 – 3.9*	4.0*	Mean
Regular Educators	0	1	16	36	7	3.12
Special Educators	1	0	5	11	1	3.08

*0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Openness scaled scores. Of the 60 regular education teacher respondents, a majority were *to a moderate extent* (48%), *to a great extent* (38%), or *to a very great extent* (3%) likely to adopt EBPs when there is an openness to change. One percent of regular educators were *to a slight extent* open to adopting EBPs when there is an openness to change. Overall, regular educators were open to adoption of EBPs *to a moderate extent* when there is an openness to change, as indicated by their mean openness score of 2.73 (see Table 20).

Of the 18 special education respondents, a majority was *to a moderate extent* (55%), *to a great extent* (27%), or *to a very great extent* (6%) likely to adopt EBPs when there is an openness to change. Six percent of special educators were *to a slight extent* open to adopting EPBs when there is an openness to change. Six percent of special educators were *not at all* open to adopt EBPs. Overall, special educators were open to adoption of evidence-based practices *to a moderate extent*, as indicated by their mean openness score of 2.70 (see Table 20).

Table 20

Openness Scaled Scores

Position	0.0 – 0.9*	1.0 – 1.9*	2.0 – 2.9*	3.0 – 3.9*	4.0*	Mean
Regular Educators	0	6	29	23	2	2.73
Special Educators	1	1	10	5	1	2.70

*0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Divergence scaled scores. Of the 60 regular education teacher respondents, the majority was *to a slight extent* (52%) or *not at all* (15%) resistant to adopting EBPs if there were perceived differences between them and current practices. Thirty-two percent

of regular educators were *to a moderate extent* resistant to adopting EBPs if there were perceived differences between them and current practices. One percent of regular educators were *to a great extent* resistant to adopting EBPs if there were perceived differences between them and current practices. Overall, regular educators were resistant to adoption of evidence-based practices *to a slight extent* if there is a perceived difference between them and current practices, as indicated by their mean divergence scale score of 2.73 (see Table 21).

Of the 18 special education respondents, a majority was *to a slight extent* (44%) or *not at all* (33%) resistant to adopting EBPs if there were perceived differences between them and current practices. Seventeen percent of special educators were *to a moderate extent* resistant to adopting EBPs if there were perceived differences between them and current practices. Six percent of special educators were *to a great extent* resistant to adopting EBPs if there were perceived differences between them and current practices. Overall, special educators were resistant to adoption of evidence-based practices *to a slight extent* if there were perceived differences between them and current practices, as indicated by their mean divergence scale score of 1.53 (see Table 21).

Table 21

Divergence Scaled Scores

Position	0.0 – 0.9*	1.0 – 1.9*	2.0 – 2.9*	3.0 – 3.9*	4.0*	Mean
Regular Educators	9	31	19	1	0	1.52
Special Educators	6	8	3	1	0	1.53

*0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Mean EBPAS scores. The mean score of all 78 educators on the requirements scale was 2.81. Appeal mean for all 78 participants was the highest at 3.09, followed by requirements at 2.81, openness at 2.72, and divergence at 1.55. The overall mean EBPAS score (2.81) of all participants (*n*=78) indicates a moderate like likelihood to adopt EBPs. Both regular education (*n*=60) and special education (*n*=18) participants mean EBPAS scores reflected an overall attitude of moderate likelihood to adopt EBPs (see Table 22).

Mean requirement scores. Although the respective mean scores of regular (2.79) and special (2.89) education participants indicated a moderate likelihood to adopt EBPs when required to do so by agency requirements, special education participant score indicates a slightly greater propensity to do so (see Table 22).

Mean appeal scores. The mean score of all participants indicated they were *to a great extent* likely to adopt EBPs when there is an intuitive appeal. Regular education participant mean score of 3.15 revealed they are likely to adopt EBPs *to a great extent* when there is an intuitive appeal. Special education participant mean score of 2.89 revealed they are likely to adopt EBPs when there is an intuitive appeal *to a moderate extent* (see Table 22).

Openness mean scores. There was an overall moderate openness to change and adoption of EBPs by all participants. Regular education participant mean score of 2.75 reflected a slightly greater, albeit still moderate, openness to change and adoption of EBPs when compared to special education participant mean score of 2.61 (see Table 22).

Divergence mean scores. There was an overall slight resistance to adopting EBPs if there were perceived differences between them and current practices. Mean scores of

both regular (1.60) and special education (1.40) participants indicated a slight resistance to adopting EBPs if there were perceived differences between them and current practices, where regular education participant score bordered on moderate resistance (see Table 22).

Table 22

Mean EBPAS and Subscale Scores

Position	Requirements	Appeal	Openness	Divergence	EBPAS Total
Regular Educators (*n*=60)	2.79	3.15	2.75	1.60	2.81
Special Educators (*n*=18)	2.89	2.89	2.61	1.40	2.79
All (*N*=78)	2.81	3.09	2.72	1.55	2.81

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Age and EBPAS. The age group with the greatest likelihood of adopting EBPs, when all four dimensions of attitudes considered, was the 31 to 35 year age group, with a mean score of 3.06. The age group least likely of adopting EBPs, when given the requirements to do so, was the 56 to 60+ year age group, with a mean score of 2.60. Within the regular educator group, the age group with the greatest likelihood of adopting EBPs, when all four dimensions of attitudes considered, was the 31 to 35 year age group, with a mean score of 3.09. Within the regular educator group, the age group with the least likelihood of adopting EBPs, when all four dimensions of attitudes considered, was the 36 to 45 year age group, with a mean score of 2.65. Within the special educator group, the age group with the greatest likelihood of adopting EBPs, when all four dimensions of attitudes considered, was the 31 to 35 year age group, with a mean score of 2.97. Within the special educator group, the age group with the least likelihood of adopting EBPs,

when all four dimensions of attitudes considered, was the 36 to 40 year age group, with a mean score of 2.50 (see Table 23).

Age and requirements. The age group with the greatest likelihood of adopting EBPs when given requirements to do so was the 31 to 35 year age group, with a mean score of 3.29. The age group with the least likelihood of adopting EBPs when given the requirements to do so was the 36 to 40 year age group, with a mean score of 2.30. Within the regular educator group, the age group with the greatest likelihood of adopting EBPs when given requirements to do so was the 31 to 35 year age group, with a mean score of 3.50. Within the regular educator group, the age group with the least likelihood of adopting EBPs when given the requirements to do so was the 36 to 40 year age group, with a mean score of 2.00. Within the special educator group, the age groups with the greatest likelihood of adopting EBPs when given requirements to do so were the 36 to 40 year age group and the 51 to 55 age group, each with a mean score of 3.50. Within the special educator group, the age group with the least likelihood of adopting EBPs when given the requirements to do so was the 45 to 50 year age group, with a mean score of 2.33 (see Table 23).

Age and appeal. The age group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 31 to 35 year age group, with a mean score of 3.31. The age group with the least likelihood of adopting EBPs when given the requirements to do so was the 56 to 60+ year age group, with a mean score of 2.83. Within the regular educator group, the age group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 31 to 35 year age group, with a

mean score of 3.42. Within the regular educator group, the age group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 56 to 60+ year age group, with a mean score of 2.82. Within the special educator group, the age group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 46 to 50 year age group, with a mean score of 3.25. Within the special educator group, the age group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so were the 36 to 40 year age group, with a mean score of 2.33 (see Table 23).

Age and openness. The age group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 31 to 35 year age group, with a mean score of 3.09. The age group with the least likelihood of adopting EBPs when there is openness to new practices was the 51 to 55 year age group, with a mean score of 2.48. Within the regular educator group, the age group with the greatest likelihood of adopting EBPs when there is an openness to new practices was the 31 to 35 year age group, with a mean score of 3.13. Within the regular educator group, the age group with the least likelihood of adopting EBPs when there is an openness to new practices was the 51 to 55 year age group, with a mean score of 2.53. Within the special educator group, the age group with the greatest likelihood of adopting EBPs when there is an openness to new practices was the 31 to 35 year age group, with a mean score of 3.00. Within the special educator group, the age group with the least likelihood of adopting EBPs when there is an openness to new practices was the 36 to 40 year age group, with a mean score of 2.00 (see Table 23).

Age and divergence. The age group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 56 to 60+ year age group, with a mean score of 2.06. The age group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 21 to 25 year age group, with a mean score of 1.08. Within the regular educator group, the age group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 56 to 60+ year age group, with a mean score of 2.11. Within the regular educator group, the age group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 21 to 25 year age group, with a mean score of 0.75. Within the special educator group, the age group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 36 to 40 year age group, with a mean score of 2.13. Within the special educator group, the age group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 41 to 45 year age group, with a mean score of 0.75 (see Table 23).

Table 23

Age Mean Scores All Participants

Group	21 – 25 years	26 – 30 years	31 – 35 years	36 – 40 years	41 – 45 years	46 – 50 years	51 – 55 years	56 – 60+ years
Regular Educator (*n*=60)	2	8	6	8	10	11	8	7
Special Educator (*n*=18)	1	2	2	2	3	4	2	2
All (*N*=78)	3	10	8	10	13	15	10	9
Group (Mean)								
Regular Educator								
Requirements	3.00	2.88	3.50	2.00	2.77	2.97	3.00	2.43
Appeal	2.88	3.31	3.42	3.09	3.10	3.18	3.22	2.82
Openness	2.75	2.75	3.13	2.75	2.85	2.61	2.53	2.79
Divergence	0.75	1.31	1.67	1.41	1.68	1.68	1.53	2.11
EBPAS	2.84	2.94	3.09	2.65	2.83	2.81	2.81	2.58
Special Educator								
Requirements	3.33*	3.00	2.67	3.50	2.67	2.33	3.50	3.00
Appeal	3.00*	3.00	3.00	1.88	2.92	3.25	2.88	2.88
Openness	2.75*	2.75	3.00	2.00	2.67	2.94	2.25	2.25
Divergence	1.75*	1.38	1.13	2.13	0.75	1.50	1.13	1.88
EBPAS	2.80*	2.83	2.97	2.50	2.80	2.88	2.77	2.67
All								
Requirements	3.11	2.90	3.29	2.30	2.74	2.80	3.10	2.55
Appeal	2.92	3.25	3.31	2.85	3.06	3.20	3.15	2.83
Openness	2.75	2.75	3.09	2.60	2.81	2.70	2.48	2.67
Divergence	1.08	1.33	1.53	1.55	1.46	1.63	1.45	2.06
EBPAS	2.82	2.92	3.06	2.62	2.82	2.83	2.80	2.60

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

*Scores are representative of one respondent.

Years of teaching. The years-of-teaching group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 0 to 5 years-of-teaching group, with a mean score of 3.14. The years-of-teaching groups with the least likelihood of adopting EBPs when all four dimensions of attitudes considered were the 26 to 30 years-of-teaching group and the 31 to 35 years-of-teaching group, each with a mean score of 2.57. Within the regular educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 6 to 10 years-of-teaching group, with a mean score of 3.08. Within the regular educator group, the years-of-teaching group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years-of-teaching group, with a mean score of 2.55. Within the special educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 6 to 10 years-of-teaching group, with a mean score of 3.29. Within the special educator group, the years-of-teaching group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years-of-teaching group, with a mean score of 2.74 (see Table 24).

***Years of teaching and requirements*.** The years-of-teaching group with the greatest likelihood of adopting EBPs when given requirements to do so was the 26 to 30 years-of-teaching group, with a mean score of 3.23. The years-of-teaching group with the least likelihood of adopting EBPs when given the requirements to do so was the 6 to 10 years-of-teaching group, with a mean score of 2.04. Within the regular educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when given

requirements to do so was the 21 to 25 years-of-teaching group, with a mean score of 3.18. Within the regular educator group, the years-of-teaching group with the least likelihood of adopting EBPs when given the requirements to do so was the 31 to 35 years-of-teaching group (*n*=1), with a mean score of 1.33. Within the regular educator group, the years-of-teaching group with more than one participant with the least likelihood of adopting EBPs when given the requirements to do so was the 11 to 15 years-of-teaching group, with a mean score of 1.62. Within the special educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when given requirements to do so was the 11 to 15 years-of-teaching group, with a mean score of 3.50. Within the special educator group, the years-of-teaching group with the least likelihood of adopting EBPs when given the requirements to do so was the 21 to 25 years-of-teaching group (*n*=1), with a mean score of 1.33. Within the special educator group, the years-of-teaching group with more than one participant with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years-of-teaching group, with a mean score of 2.50 (see Table 24).

***Years of teaching and appeal*.** The years-of-teaching group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 16 to 20 years-of-teaching group, with a mean score of 3.21. The years-of-teaching group with the least likelihood of adopting EBPs when given the requirements to do so was the 6 to 10 years-of-teaching group, with a mean score of 2.69. Within the regular educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 6 to 10 years-of-teaching group, with a mean score of

3.46. Within the regular educator group, the years-of-teaching group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 31 to 35 years-of-teaching group (*n*=1), with a mean score of 2.75. Within the regular educator group, the years-of-teaching group with more than one participant with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 16 to 20 years-of-teaching group, with a mean score of 2.90. Within the special educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 26 to 30 years-of-teaching group, with a mean score of 3.25. Within the special educator group, the years-of-teaching group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 26 to 30 years-of-teaching group, with a mean score of 1.63 (see Table 24).

Years of teaching and openness. The years-of-teaching group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 0 to 5 years-of-teaching group, with a mean score of 3.20. The years-of-teaching group with the least likelihood of adopting EBPs when there is openness to new practices was the 36 to 40 years-of-teaching group (*n*=1), with a mean score of 2.25. The years-of-teaching groups with more than one participant and the least likelihood of adopting EBPs when there is an openness to new practices were the 11 to 15 years-of-teaching group, the 26 to 30 years-of-teaching group, and the 31 to 35 years-of-teaching group, each with a mean score of 2.50. Within the regular educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs when there is an openness to new practices was the 6 to 10 years-of-teaching group, with a mean score of 3.07. Within the regular educator

group, the years-of-teaching group with the least likelihood of adopting EBPs when there is openness to new practices was the 16 to 20 years-of-teaching group, with a mean score of 2.50. Within the special educator group, the years-of-teaching group with the greatest likelihood of adopting EBPs where there is openness to new practices was the 6 to 10 years-of-teaching group, with a mean score of 3.50. Within the special educator group, the years-of-teaching group with the least likelihood of adopting EBPs when there is openness to new practices was the 11 to 15 years-of-teaching group, with a mean score of 1.63 (see Table 24).

***Years of teaching and divergence*.** The years-of-teaching groups with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs were the 21 to 25 years-of-teaching group, the 26 to 30 years-of-teaching group, and the 31 to 35 years-of-teaching group, each with a mean score of 1.88. The years-of-teaching group least likely of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 16 to 20 years-of-teaching group, with a mean score of 1.41. Within the regular educator group, the years-of-teaching group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 26 to 30 years-of-teaching group, with a mean score of 1.93. Within the regular educator group, the years-of-teaching group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 0 to 5 years-of-teaching group, with a mean score of 1.32. Within the special educator group, the years-of-teaching group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 31 to 35

years-of-teaching group (*n*=1), with a mean score of 2.25. Within the special educator group, the years-of-teaching group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 11 to 15 years-of-teaching group, with a mean score of 2.13. Within the special educator group, the years-of-teaching group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 16 to 20 years-of-teaching group, with a mean score of 0.75 (see Table 24).

Table 24

Years of Teaching Mean Scores

Group	0 – 5 years	6 – 10 years	11 – 15 years	16 – 20 years	21 – 25 years	26 – 30 years	31 – 35 years	36 – 40 years
Regular Educator (*n*=60)	14	7	7	11	13	7	1	0
Special Educator (*n*=18)	6	3	2	2	1	2	1	1
All (*N*=78)	20	11	9	13	14	9	2	1
Group (Mean)								
Regular Educator								
Requirements	2.95	3.57	1.62	2.27	3.18	3.14	1.33*	-
Appeal	3.29	3.46	3.00	2.90	3.19	3.07	2.75*	-
Openness	2.73	3.07	2.93	2.50	2.73	2.75	2.75*	-
Divergence	1.32	1.68	1.50	1.91	1.44	1.93	1.50*	-
EBPAS	2.91	3.08	2.59	2.55	2.93	2.80	2.40*	-
Special Educator								
Requirements	2.89	3.11	3.50	2.50	1.33*	3.00	3.33*	2.67*
Appeal	2.83	2.42	1.63	2.88	3.50*	3.25	2.75*	3.00*
Openness	2.71	3.50	1.63	2.50	2.75*	2.38	2.25*	2.25*
Divergence	1.33	1.08	2.13	0.75	1.00*	1.75	2.25*	1.50*
EBPAS	2.77	3.29	2.27	2.74	2.73*	2.83	2.73*	2.60*
All								
Requirements	3.43	2.04	2.31	3.05	3.11	3.23	3.15	2.67*
Appeal	3.45	2.69	2.90	3.21	3.11	3.11	2.75	3.00*
Openness	3.20	2.64	2.50	2.73	2.67	2.50	2.50	2.25*
Divergence	1.50	1.64	1.73	1.41	1.88	1.88	1.88	1.50*
EBPAS	3.14	2.52	2.58	2.91	2.81	2.57	2.57	2.60*

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

*Scores are representative of one respondent.

- No respondents.

Years in current position. The years-in-current-position group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 21 to 25 years of service group, with a mean score of 3.09. The years-in-current-position group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of service group, with a mean score of 2.16. Within the regular educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 21 to 25 years of service group, with a mean score of 3.27. Within the regular educator group, years-in-current-position group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of service group, with a mean score of 2.07. Within the special educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of service group, with a mean score of 2.84. Within the special educator group, the years-in-current-position group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of experience group (n=1), with a mean score of 2.60. Within the special educator group, the years-in-current-position group with more than one participant and the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 6 to 10 years of experience group (n=1), with a mean score of 2.67 (see Table 25).

***Years in current position and requirements*.** The years-in-current-position group with the greatest likelihood of adopting EBPs when given requirements to do so was the 21 to 25 years of service group, with a mean score of 3.05. The years-in-current-position

group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 of service group, with a mean score of 2.00. Within the regular educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when given requirements to do so was the 21 to 25 years of service group, with a mean score of 3.75. Within the regular educator group, the years-in-current-position group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years of service group, with a mean score of 1.87. Within the special educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when given requirements to do so was the 6 to 10 years of service group, with a mean score of 4.00. Within the special educator group, the years-in-current-position group with the least likelihood of adopting EBPs when given the requirements to do so was the 21 to 25 years of service group, with a mean score of 1.67 (see Table 25).

***Years in current position and appeal*.** The years-in-current-position group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group, with a mean score of 3.50. The years-in-current-position group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years of service group, with a mean score of 2.45. Within the regular educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group, with a mean score of 3.63. Within the regular educator group, the years-in-current-position group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 16 to 20 years of service group, with a mean score of 2.35.

Within the special educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group (*n*=1), with a mean score of 3.50. Within the special educator group, the years-in-current-position group with more than one participant and the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group, with a mean score of 3.25. Within the special educator group, the years-in-current-position group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 0 to 5 years of service group, with a mean score of 2.13 (see Table 25).

***Years in current position and openness*.** The years-in-current-position group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 6 to 10 years of service group, with a mean score of 3.03. The years-in-current-position group with the least likelihood of adopting EBPs when there is openness to new practices was the 16 to 20 years of service group, with a mean score of 1.92. Within the regular educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 6 to 10 years of service group, with a mean score of 3.29. Within the regular educator group, the years-in-current-position group with the least likelihood of adopting EBPs when there is an openness to new practices was the 21 to 25 years of service group, with a mean score of 1.06. Within the special educator group, the years-in-current-position group with the greatest likelihood of adopting EBPs when there is an openness to new practices was the 0 to 5 years of service group, with a mean score of 2.77. Within the special educator group, the

years-in-current-position group with the least likelihood of adopting EBPs when there is an openness to new practices was the 11 to 15 years of service group (*n*=1), with a mean score of 1.75. Within the special educator group, the years-in-current-position group with more than one participant and the least likelihood of adopting EBPs when there is an openness to new practices was the 6 to 10 years of service group, with a mean score of 2.13 (see Table 25).

***Years in current position and divergence*.** The years-in-current-position group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 26 to 30 years of service group, with a mean score of 2.00. The years-in-current-position groups with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs were the 6 to 10 years of service group and the 11 to 15 years of service group, each with a mean score of 1.92. The years-in-current-position group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 21 to 25 years of service group, with a mean score of 1.21. Within the regular educator group, the years-in-current-position group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 11 to 15 years of service group, with a mean score of 2.03. Within the regular educator group, the years-in-current-position group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 21 to 25 years of service group, with a mean score of 1.06. Within the special educator group, the years-in-current-position group with the greatest likelihood of

resisting EBPs when there is perceived divergence between usual practices and EBPs was the 6 to 10 years of service group, with a mean score of 2.25. Within the special educator group, the years-in-current-position group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 11 to 15 years of service group (*n*=1), with a mean score of 0.75. Within the special educator group, the years-in-current-position group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 0 to 5 years of service group, with a mean score of 1.29 (see Table 25).

Table 25

Years in Current Position Mean Scores

Group	0 – 5 years	6 – 10 years	11 – 15 years	16 – 20 years	21 – 25 years	26 – 30 years
Regular Educator (*n*=60)	32	7	11	5	4	1
Special Educator (*n*=18)	12	2	1	1	2	0
All (*N*=78)	44	9	12	6	6	1
Group (Mean)						
Regular Educator						
Requirements	2.85	2.86	2.67	1.87	3.75	2.33*
Appeal	3.18	3.46	3.05	2.35	3.63	3.25*
Openness	2.84	3.29	2.50	1.85	1.06	2.75*
Divergence	1.41	1.82	2.02	1.85	1.06	2.00*
EBPAS	2.87	3.03	2.68	2.07	3.27	2.60*
Special Educator						
Requirements	3.00	4.00	2.00*	2.67*	1.67	-
Appeal	2.90	2.13	3.50*	3.00*	3.25	-
Openness	2.77	2.13	1.75*	2.25*	2.75	-
Divergence	1.29	2.25	0.75*	1.50*	1.50	-
EBPAS	2.84	2.67	2.67*	2.60*	2.73	-
All						
Requirements	2.89	2.90	2.61	2.00	3.05	2.33*
Appeal	3.10	3.17	3.08	2.45	3.50	3.25*
Openness	2.81	3.03	2.43	1.92	2.92	2.75*
Divergence	1.38	1.92	1.92	1.79	1.21	2.00*
EBPAS	2.86	2.95	2.68	2.16	3.09	2.60*

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

*Scores are representative of one respondent.

- No respondents.

Years in current school. The years-in-current-school group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 21 to 25 years of service group, with a mean score of 2.97. The years-in-current-school group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of service group, with a mean score of 2.45. Within the regular educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 21 to 25 years of service group, with a mean score of 3.07. Within the regular educator group, years-in-current-school group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 16 to 20 years of service group, with a mean score of 2.41. Within the special educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 0 to 5 years of service group, with a mean score of 2.85. Within the special educator group, the years-in-current-school group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 0 to 5 years of service group, with a mean score of 2.85. Within the special educator group, the years-in-current-school group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 6 to 10 years of service group, with a mean score of 2.67 (see Table 26).

Years in current school and requirements. The years-in-current-school group with the greatest likelihood of adopting EBPs when given requirements to do so was the 0 to 5 years of service group, with a mean score of 3.06. The years-in-current-school

group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years of service group, with a mean score of 2.38. Within the regular educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when given requirements to do so was the 6 to 10 years of service group, with a mean score of 3.08. Within the regular educator group, the years-in-current-school group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years of service group, with a mean score of 2.30. Within the special educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when given requirements to do so was the 6 to 10 years of service group, with a mean score of 4.00. Within the special educator group, the years-in-current-school group with the least likelihood of adopting EBPs when given the requirements to do so was the 21 to 25 years of service group, with a mean score of 1.67 (see Table 26).

Years in current school and appeal. The years-in-current-school group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group, with a mean score of 3.46. The years-in-current-school group with the least likelihood of adopting EBPs when given the requirements to do so was the 16 to 20 years of service group, with a mean score of 2.73. Within the regular educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 6 to 10 years of service group, with a mean score of 3.33. Within the regular educator group, the years-in-current-school group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 16 to 20 years of service group, with a mean score of 2.75. Within the special

educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group (*n*=1), with a mean score of 3.50. Within the special educator group, the years-in-current-school group with more than one participant and the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 21 to 25 years of service group, with a mean score of 3.25. Within the special educator group, the years-in-current-school group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 6 to 10 years of service group, with a mean score of 2.13 (see Table 26).

***Years in current school and openness*.** The years-in-current-school group with the greatest likelihood of adopting evidence-based practices when there is openness to new practices was those with six to ten years of service, with a mean score of 2.91 (Table 27). The years-in-current-school group with the least likelihood of adopting EBPs when there is an openness to new practices was the 26 to 30 years of service group (*n*=1), with a mean score of 1.75. The years-in-current-school group with more than one participant and the least likelihood of adopting EBPs when there is openness to new practices was the 6 to 10 years of service group, with a mean score of 2.31. Within the regular educator group, the years-in-current-school group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 6 to 10 years of service group, with a mean score of 3.17. Within the regular educator group, the years-in-current-school group with the least likelihood of adopting EBPs when there is openness to new practices was the 26 to 30 years of service group (*n*=1), with a mean score of 1.75. Within the regular educator group, the years-in-current-school group with more than one respondent and the

least likelihood of adopting EBPs when there is an openness to new practices was the 16 to 20 years of service group, with a mean score of 2.23. Within the special educator group, the years-in-current-school groups with the greatest likelihood of adopting EBPs where there is an openness to new practices were the 16 to 20 years of service group and the 21 to 25 years of service group, with a mean score of 2.75. Within the special educator group, the years-in-current-school groups with the least likelihood of adopting EBPs when there is an openness to new practices was the 11 to 15 years of service group (*n*=1), with a mean score of 1.75. Within the special educator group, the years-in-current-school group with more than one participant and the least likelihood of adopting EBPs when there is openness to new practices was the 6 to 10 years of service group, with a mean score of 2.13 (see Table 26).

***Years in current school and divergence*.** The years-in-current-school group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 26 to 30 years of service group (*n*=1), with a mean score of 2.25. The years-in-current-school group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 6 to 10 years of service group, with a mean score of 2.00. The years-in-current-school group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 0 to 5 years of service group, with a mean score of 1.41. Within the regular educator group, the years-in-current-school group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 26 to 30 years of service group

(*n*=1), with a mean score of 2.25. Within the regular educator group, the years-in-current-school group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 16 to 20 years of service group, with a mean score of 1.95. Within the special educator group, the years-in-current-school group with the greatest likelihood of EBPs when there is perceived divergence between usual practices and EBPs was the 6 to 10 years of service group, with a mean score of 2.25. Within the special educator group, the years-in-current-school group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 11 to 15 years of service group (*n*=1), with a mean score of 0.75. Within the special educator group, the years-in-current-school group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 16 to 20 years of service group, with a mean score of 1.13 (see Table 26).

Table 26

Years in Current School Mean Score

Group	0 – 5 years	6 – 10 years	11 – 15 years	16 – 20 years	21 – 25 years	26 – 30 years	31 – 35 years
Regular Educator (*n*=60)	29	6	7	11	5	1	1
Special Educator (*n*=18)	11	2	1	2	2	0	0
All (*N*=78)	40	8	8	13	7	1	1
Group (Mean)							
Regular Educator							
Requirements	3.08	2.39	2.52	2.30	3.27	3.00*	1.33*
Appeal	3.27	3.33	2.93	2.75	3.55	3.00*	2.75*
Openness	2.82	3.17	3.04	2.23	2.85	1.75*	2.75*
Divergence	1.43	1.92	1.54	1.95	1.25	2.25*	1.50*
EBPAS	2.95	2.83	2.75	2.41	3.07	2.53*	2.40*
Special Educator							
Requirements	3.00	4.00	2.00*	2.84	1.67	-	-
Appeal	2.95	2.13	3.50*	2.63	3.25	-	-
Openness	2.73	2.13	1.75*	2.75	2.75	-	-
Divergence	1.34	2.25	0.75*	1.13	1.50	-	-
EBPAS	2.85	2.67	2.67*	2.70	2.73	-	-
All							
Requirements	3.06	2.79	2.46	2.38	2.81	3.00*	1.33*
Appeal	3.18	3.03	3.00	2.73	3.46	3.00*	2.75*
Openness	2.80	2.91	2.88	2.31	2.82	1.75*	2.75*
Divergence	1.41	2.00	1.44	1.83	1.32	2.25*	1.50*
EBPAS	2.92	2.79	2.74	2.45	2.97	2.53*	2.40*

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

*Scores are representative of one respondent.

- No respondents.

Educational attainment mean scores. The overall EBPAS mean scores of bachelor's degree respondents with 2.77 and master's degree respondents with 2.83 show a moderate likelihood to adopt EBPs, where master's level participants were slightly more accepting. Similarly, both regular and special education participants with master's degrees held moderate accepting attitudes toward adoption of EBPs, slightly more than those with bachelor's degrees in either group (see Table 27).

Mean scores both bachelor's and master's degree participants reflect a moderate likelihood to adopt EBPs when required to do so. Master's degree regular education participants were slightly more likely to adopt EBPs when required to do so than bachelor's degree regular education participants (see Table 27).

All participant mean scores for both bachelor's (3.07) and master's degree (3.12) participants indicate willingness to adopt EBPs when there is an intuitive appeal to a great extent. Regular education bachelor's and master's degree participants and special education master's degree participants demonstrated a willingness to adopt EBPs when there is an intuitive appeal to a great extent, while bachelor's degree special education participants showed a moderate willingness to adopt them (see Table 27).

All participants whether regular or special education bachelor's or master's degree participants demonstrated a moderate openness to adopt EBPs, with master's degree participants showing a slightly greater willingness to do so (see Table 27).

When there is a perceived divergence between usual practices and EBPs s, all participants, whether regular or special education who held bachelor's or master's degrees, showed a slight resistance to adopt EBPs. The least likely to resist adoption of

EBPs were special education participants with master's degrees, and the most likely to resist adoption of EBPs were regular education participants with bachelor's degrees (see Table 27).

Table 27

Educational Attainment Mean Scores

Group	Bachelor's	Master's
Regular Educator (*n*=60)	24	36
Special Educator (*n*=18)	10	8
All (*N*=78)	34	44
Group (Mean)		
Regular Educator		
Requirements	2.67	2.87
Appeal	3.22	3.10
Openness	2.71	2.78
Divergence	1.60	1.58
EBPAS	2.77	2.84
Special Educator		
Requirements	3.17	2.54
Appeal	2.70	3.13
Openness	2.58	2.66
Divergence	1.55	1.23
EBPAS	2.76	2.82
All		
Requirements	2.81	2.81
Appeal	3.07	3.12
Openness	2.67	2.76
Divergence	1.59	1.52
EBPAS	2.77	2.83

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

School size. The school-size group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 101 to 200 students group, with a mean score of 3.07. The school-size group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 1,000+ students group (*n*=1), with a mean score of 2.47. The school-size group with the least likelihood of adopting EBPs with more than one participant when all four dimensions of attitudes considered was the 401 to 500 students group, with a mean score of 2.64. Within the regular educator group, the school-size group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 101 to 200 students group, with a mean score of 3.09. Within the regular educator group, school-size group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 1,000+ students group (*n*=1), with a mean score of 2.47. Within the regular educator group, the school-size group with more than one participant and the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 201 to 300 students group, with a mean score of 2.73. Within the special educator group, the school-size group with the greatest likelihood of adopting EBPs when all four dimensions of attitudes considered was the 101 to 200 students group, with a mean score of 2.98. Within the special educator group, the school-size group with the least likelihood of adopting EBPs when all four dimensions of attitudes considered was the 401 to 500 students group, with a mean score of 2.65 (Table 29).

***School size and requirements*.** The school-size group with the greatest likelihood of adopting EBPs when given requirements to do so was the 0 to 100 students group,

with a mean score of 3.09. The school-size group with the least likelihood of adopting *evidence-based practices* when given the requirements to do so was the 1,000+ students group (n=1), with a mean score of 2.00. The school-size group with more than one participant and the least likelihood of adopting EBPs when given the requirements to do so was the 201 to 300 students group, with a mean score of 2.46. Within the regular educator group, the school-size group with the greatest likelihood of adopting EBPs when given requirements to do so was the 101 to 200 students group, with a mean score of 3.10. Within the regular educator group, the school-size group with the least likelihood of adopting EBPs when given the requirements to do so was the 1,000+ students group (n=1), with a mean score of 2.00. Within the regular educator group, the school-size group with more than one participant and the least likelihood of adopting EBPs when given the requirements to do so was the 201 to 300 students group, with a mean score of 2.39. Within the special educator group, the school-size group with more than one participan, and the greatest likelihood of adopting EBPs when given requirements to do so was the 401 to 500 students group, with a mean score of 3.17. Within the special educator group, the school-size group with the least likelihood of adopting EBPs when given requirements to do so was the 301 to 400 students group, with a mean score of 2.61 (see Table 28).

***School size and appeal*.** The school-size group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 0 to 100 students group, with a mean score of 3.36. The school-size group with the least likelihood of adopting EBPs when given the requirements to do so was the 501 to 600 students group, with a

mean score of 2.90. Within the regular educator group, the school-size group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 101 to 200 students group, with a mean score of 3.50. Within the regular educator group, the school-size group least likely of adopting EBPs when there is an intuitive appeal to do so was the 501 to 600 students group, with a mean score of 2.90. Within the special educator group, the school-size group with the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 0 to 100 students group (n=1), with a mean score of 3.50. Within the special educator group, the school-size group with more than one participant and the greatest likelihood of adopting EBPs when there is an intuitive appeal to do so was the 101 to 300 students group, with a mean score of 3.00. Within the special educator group, the school-size group with the least likelihood of adopting EBPs when there is an intuitive appeal to do so was the 101 to 200 students group, with a mean score of 2.83 (see Table 28).

School size and openness. The school-size group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 101 to 200 students group, with a mean score of 3.13. The school-size group with the least likelihood of adopting EBPs when there is openness to new practices was the 601 to 700 students group, with a mean score of 2.25. Within the regular educator group, the school-size group with the greatest likelihood of adopting EBPs when there is openness to new practices was the 101 to 200 students group, with a mean score of 3.13. Within the regular educator group, the school-size group with the least likelihood of adopting EBPs when there is openness to new practices was the 601 to 700 students group, with a mean

score of 2.25. Within the special educator group, the school-size group with the greatest likelihood of adopting EBPs where there is openness to new practices was the 101 to 200 students group, with a mean score of 3.17. Within the special educator group, the school-size groups with the least likelihood of adopting EBPs when there is openness to new practices was the 0 to 100 students group (*n*=1), with a mean score of 2.00. Within the special educator group, the school-size group with more than one participant and the least likelihood of adopting EBPs when there is openness to new practices was the 401 to 500 students group, with a mean score of 2.06 (see Table 28).

***School size and divergence*.** The school-size group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 1,000+ students group (*n*=1), with a mean score of 2.00. The school-size group with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 601 to 700 students group, with a mean score of 1.75. The school-size group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 101 to 200 students group, with a mean score of 1.21. Within the regular educator group, the school-size group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 1,000+ students group, with a mean score of 2.00. Within the regular educator group, the school-size groups with more than one participant and the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs were the 0 to 100 students group and the 601 to 700 students group, each with a mean score of 1.75. Within the regular

educator group, the school-size group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 101 to 200 students group, with a mean score of 1.30. Within the special educator group, the school-size group with the greatest likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 401 to 500 students group, with a mean score of 1.69. Within the special educator group, the school-size group with the least likelihood of resisting EBPs when there is perceived divergence between usual practices and EBPs was the 101 to 200 students group, with a mean score of 0.92 (see Table 28).

Table 28

School Size Mean Scores

Group	0 – 100	101 – 200	201 – 300	301 – 400	401 – 500	501 – 600	601 – 700	1,000+
Regular Educator (*n*=60)	6	10	12	10	14	5	2	1
Special Educator (*n*=18)	1	3	4	6	4	0	0	0
All (*N*=78)	7	13	16	16	18	5	2	1
Group (Mean)								
Regular Educator								
Requirements	2.92	3.10	2.39	3.03	2.57	3.13	3.00	2.00*
Appeal	3.33	3.50	3.02	3.20	2.98	2.90	3.25	3.00*
Openness	2.71	3.13	2.83	2.88	2.55	2.50	2.25	2.25*
Divergence	1.75	1.30	1.54	1.60	1.68	1.70	1.75	2.00*
EBPAS	2.87	3.09	2.73	2.91	2.64	2.76	2.74	2.47*
Special Educator								
Requirements	4.00*	3.00	2.67	2.61	3.17	-	-	-
Appeal	3.50*	2.83	3.00	2.88	2.69	-	-	-
Openness	2.00*	3.17	2.88	2.63	2.06	-	-	-
Divergence	1.50*	0.92	1.63	1.29	1.69	-	-	-
EBPAS	2.93*	2.98	2.90	2.69	2.65	-	-	-
All								
Requirements	3.09	3.08	2.46	2.87	2.70	3.13	3.00	2.00*
Appeal	3.36	3.35	3.02	3.08	2.92	2.90	3.25	3.00*
Openness	2.61	3.13	2.84	2.78	2.44	2.50	2.25	2.25*
Divergence	1.71	1.21	1.56	1.48	1.68	1.70	1.75	2.00*
EBPAS	2.87	3.07	2.77	2.82	2.64	2.79	2.74	2.47*

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

*Scores are representative of one respondent.

- No respondents.

Means and standard deviations. The total EBPAS mean score for all participants was 2.80, with a standard deviation of 0.45. The total EBPAS mean score for the regular education participants was 2.81, with a standard deviation of 0.46. The total EBPAS mean score for the special education participants was 2.79, with a standard deviation of 0.43 (see Table 29).

The total requirement mean score for all participants was 2.81, with a standard deviation of 1.03. The total requirement mean score for the regular education participants was 2.79, with a standard deviation of 1.11. The total requirement mean score for the special education participants was 2.89, with a standard deviation of 0.74 (see Table 29).

The total appeal mean score for all participants was 3.09, with a standard deviation of 0.63. The total appeal mean score for the regular education participants was 3.15, with a standard deviation of 0.56. The total appeal mean score for the special education participants was 2.89, with a standard deviation of 0.80 (see Table 29).

The total openness mean score for all participants was 2.72, with a standard deviation of 0.68. The total openness mean score for the regular education participants was 2.75, with a standard deviation of 0.62. The total openness mean score for the special education participants was 2.61, with a standard deviation of 0.82 (see Table 29).

The total divergence mean score for all participants was 1.55, with a standard deviation of 0.66. The total divergence mean score for the regular education participants was 1.59, with a standard deviation of 0.64. The total divergence mean score for the special education participants was 1.40, with a standard deviation of 0.72 (see Table 29).

Table 29

Means and Standard Deviations

Group		Requirement	Appeal	Openness	Divergence	EBPAS
Regular Educator	Mean	2.79	3.15	2.75	1.59	2.81
	n	60	60	60	60	60
	SD	1.11	0.56	0.63	0.64	0.46
Special Educator	Mean	2.89	2.89	2.61	1.40	2.79
	n	18	18	18	18	18
	SD	0.74	0.80	0.82	0.72	0.43
Total	Mean	2.81	3.09	2.72	1.55	2.80
	N	78	78	78	78	78
	SD	1.03	0.63	0.68	0.66	0.45

Note. 0.0 – 0.9 = *not at all,* 1.0 – 1.9 = *to a slight extent,* 2.0 – 2.9 = *to a moderate extent,* 3.0 – 3.9 = *to a great extent,* 4.0 = *to a very great extent.*

Statistical Analysis

Variable correlations all participants. The strongest correlations between EBPAS scores of all participants and all other independent variables was the number of years participants were teaching in their current school (r = -2.52), with significance below p 0.05 (p = 0.026), and student-population (r = -2.31), with significance below p 0.05 (p = 0.041). The weakest correlation between EBPAS scores of all participants and all other independent variables was the degree held by participants (r = 0.076), with significance above p 0.05 (p = 0.510). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, and (d) number of years teaching in their current position and their willingness to adopt EBPs is rejected when considering the overall attitudes of all participants. The

hypothesis that there is a relationship between the (a) number of years of service in their current school, and (b) the number of students in a school and their willingness to adopt EBPs is accepted when considering the overall attitudes of all participants. The negative correlations indicate that as number of years of service in their current school increases, and as the number of students in a school increases, participant willingness to adopt EBPs decreases (see Table 30).

The strongest correlation between requirement scores of all participants and all other independent variables was the number of years in the current school (r = -2.41), with significance below p 0.05 (p = 0.034). The weakest correlation between requirement scores of all participants and all other independent variables was the age of participants (r = -.001), with significance below p 0.05 (p = 0.990). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) years of service in one teaching position, and (e) number of students in a school and willingness to adopt EBPs when required to do so is rejected. The hypothesis that there is a relationship between the number of years teaching in their current school and willingness to adopt EBPs when required to do so is accepted. The negative correlation indicates that as the number of years teaching in their current school increases, participant willingness to adopt EBPs when required to do so decreases (see Table 30).

Although there were no significant correlations between appeal scores of all participants and any of the independent variables, the strongest was with the size of the student population (r = -0.193). The weakest correlations between appeal scores of all

participants and any of the independent variables was with the years participants taught in their current position (r = -.003), with significance above p 0.05 (p = 0.774). Therefore, all hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and an intuitive appeal to adopt EBPs is rejected (see Table 30).

The strongest correlation between openness scores of all participants and all independent variables was the size of the student population (r = -0.266), with significance below p 0.05 (p = 0.019). The weakest correlation between openness scores of all participants and all independent variables was the degree held by participants (r = 0.068), with significance above p 0.05 (p = 0.553). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, and (e) number of years of service in one teaching position and willingness to adopt EBPs based on openness is rejected. The hypothesis that there is a relationship between the number of students in a school and willingness to adopt EBPs based on openness is accepted. The negative correlation indicates that as the number of students increases in a school, the openness to adopt EBPs decreases (see Table 30).

The strongest correlation between divergence scores of all participants and all independent variables was the age of participants (r = 0.249), with significance below p 0.05 (p = 0.028). The weakest correlation between divergence scores of all participants and all independent variables was the degree held by participants (r = 0.054), with

significance above *p* 0.05 (*p* = 0.639). Therefore, the hypothesis that there is a relationship between (a) educational attainment, (b) number of years of service, (c) number of years of service teaching in current school, (d) number of years of service in one teaching position, and (e) number of students in a school and willingness to adopt EBPs when there is a perceived divergence from usual practices is rejected. The hypothesis that there is a relationship between the age of teachers and willingness to adopt EBPs when there is a perceived divergence from usual practices is accepted. The positive correlation indicates that as the age of teachers increases, attitudes of perceived divergence from usual practices increases (see Table 30).

Table 30

Correlations All Participants

		Requirement	Appeal	Openness	Divergence	EBPAS
Years teaching	Pearson Correlation	-.049	-.081	-.131	.200	-.125
	Sig. (2-tailed)	.668	.483	.253	.079	.277
Years current school	Pearson Correlation	-.241*	-.102	-.169	.134	-.252*
	Sig. (2-tailed)	.034	.375	.139	.243	.026
Years current position	Pearson Correlation	-.120	-.003	-.189	.151	-.154
	Sig. (2-tailed)	.295	.982	.098	.188	.179
Student Population	Pearson Correlation	-.072	-.193	-.266*	.151	-.231*
	Sig. (2-tailed)	.529	.091	.019	.186	.041
Age	Pearson Correlation	-.063	-.081	-.120	.249*	-.159
	Sig. (2-tailed)	.582	.481	.294	.028	.165
Degree	Pearson Correlation	-.001	.033	.068	-.054	.076
	Sig. (2-tailed)	.990	.774	.553	.639	.510

*Correlation is significant at the 0.05 level (2-tailed).

Correlations regular education participants. The strongest correlations between EBPAS scores of regular education participants and all other independent variables was the number of years participants were teaching in their current school

(r = -2.86), with significance below p 0.05 (p = 0.027). The weakest correlation between EBPAS scores of regular education participants and all other independent variables was the degree held by participants (r = 0.073), with significance above p 0.05 (p = 0.581). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service in on teaching position, and (e) number of students in a school and willingness to adopt EBPs is rejected among regular education participants. The hypothesis that there is a relationship between the number of years teaching in current school and willingness to adopt EBPs is accepted among regular education participants. The negative correlation indicates that as the number of years teaching in their current school increases, regular educator willingness to adopt EBPs decreases among regular education participants (See Table 31).

Although not significant, the strongest correlation between requirement scores of regular education participants and all other independent variables was the number of years participants were teaching in their current school (r = -1.91), with significance above p 0.05 (p = 0.144). The weakest correlation between requirement scores of regular education participants and all other independent variables was the number of years participants taught in their current position (r = -.032), with significance above p 0.05 (p = 0.806). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching

position, and (f) number of students in a school and a requirement to adopt EBPs is rejected among regular education participants (see Table 31).

Although there were no significant correlations between appeal scores of regular education participants and any of the independent variables, the strongest was with the size of the student population (r = -0.232), with significance above p 0.05 (p = 0.074). The weakest correlations between appeal scores of regular education participants and any of the independent variables was with the number of years participants taught in their current position (r = -.086), with significance above p 0.05 (p = 0.512). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and an intuitive appeal to adopt EBPs is rejected among regular education participants (see Table 31).

The strongest correlation between openness scores of regular education participants and all independent variables was the size of the student population (r = -0.284), with significance below p 0.05 (p = 0.028). The weakest correlation between openness scores of regular education participants and all independent variables was the degree held by participants (r = 0.060), with significance above p 0.05 (p = 0.649). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, and (e) number of years of service in one teaching position and openness to adopt EBPs is rejected among regular education participants. The

hypothesis that there is a relationship between the number of students in a school and openness to adopt EBPs is accepted among regular education participants. The negative correlation indicates that as the size of the student population in a school increases, regular education participant openness to adopt EBPs decreases among regular education participants (see Table 31).

The strongest correlation between divergence scores of regular education participants and all independent variables was the age of participants ($r = 0.326$), with significance below p 0.05 ($p = 0.011$). The weakest correlation between divergence scores of regular education participants and all independent variables was the degree held by participants ($r = 0.016$), with significance above p 0.05 ($p = 0.903$). Therefore, the hypothesis that there is a relationship between (a) educational attainment, (b) number of years of service, (c) number of years of service teaching in current school, (d) number of years of service in one teaching position, and (e) number of students in a school and willingness to adopt EBPs when there is a perceived divergence from usual practices is rejected among regular education participants. The hypothesis that there is a relationship between the age of teachers and willingness to adopt EBPs when there is a perceived divergence from usual practices is accepted among regular education participants. The positive correlation indicated that as the age of teachers increases, attitudes of perceived divergence from usual practices increases among regular education participants (see Table 31).

Correlations special education participants. Although there were no significant correlations, the strongest was between EBPAS scores of special education participants and all other independent variables was the of number of students in school (r = -2.88), with significance above p 0.05 (p = 2.47). The weakest correlation between EBPAS scores of special education participants and all other independent variables was the age of participants (r = 0.058), with significance above p 0.05 (p = 0.819). Therefore, all hypotheses that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and the overall willingness to adopt EBPs are rejected among special educators (see Table 31).

The strongest correlations between requirement scores of special education participants and all other independent variables was the number of years participants were teaching in their current position (r = -.557), with significance below p 0.05 (p = 0.016), and years teaching in their current school (r = 0.513), with significance below p 0.05 (p = 0.030). The weakest correlation between requirement scores of special education participants and all other independent variables was the age of participants (r = -.071), with significance above p 0.05 (p = 0.778). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, and (d) number of students in a school and the requirement to adopt EBPs is rejected among special education participants. The hypothesis that there is a relationship between (a) number of years of service teaching in current school and (b)

number of years of service teaching in one position and willingness to adopt EBPs when required to do so is accepted among special education participants. The negative correlation indicates that as the number of years of service teaching in current school and number of years teaching in one position increases, the willingness to adopt EBPs when required to do so decreases among special education participants (see Table 31).

Although there were no significant correlations between appeal scores of special education participants and any of the independent variables, the strongest was with the degree held by participants (r = 0.271), with significance above p 0.05 (p = 0.276). The weakest correlations between appeal scores of special education participants and any of the independent variables was with the number of years participants taught in their current school (r = .049), with significance above p 0.05 (p = 0.846). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and an intuitive appeal to adopt EBPs is rejected among special education participants (see Table 31).

Although there were no significant correlations between openness scores of special education participants and all independent variables, the strongest correlation was the size of the student population (r = -0.283), with significance above p 0.05 (p = 0.256). The weakest correlation between openness scores of special education participants and all independent variables was the degree held by participants (r = -0.036), with significance above p 0.05 (p = 0.888). Therefore, the hypothesis that there is a relationship between

(a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and openness to adopt EBPs is rejected among special education participants (see Table 31).

Although there were no significant correlations between divergence scores of special education participants and all independent variables, the strongest was the degree held by participants (r = -0.234), with significance above p 0.05 (p = 0.350). The weakest correlation between divergence scores of regular education participants and all independent variables was the age of participants (r = -0.22), with significance above p 0.05 (p = 0.932). Therefore, the hypothesis that there is a relationship between (a) age of teachers, (b) educational attainment, (c) number of years of service, (d) number of years of service teaching in current school, (e) number of years of service in one teaching position, and (f) number of students in a school and willingness to adopt EBPs when there is a perceived divergence from usual practices is rejected among special education participants (see Table 31).

Table 31

Correlations Regular Education and Special Education

Regular Educator (*n*=60)		Requirement	Appeal	Openness	Divergence	EBPAS
Years teaching	Pearson Correlation	-.034	-.179	-.076	.195	-.123
	Sig. (2-tailed)	.797	.170	.563	.135	.347
Years current school	Pearson Correlation	-.191	-.191	-.234	.168	-.286*
	Sig. (2-tailed)	.144	.144	.073	.199	.027
Years current position	Pearson Correlation	-.032	-.086	-.223	.163	-.160
	Sig. (2-tailed)	.806	.512	.087	.214	.222
Student population	Pearson Correlation	-.062	-.232	-.284*	.137	-.226
	Sig. (2-tailed)	.639	.074	.028	.296	.083
Age	Pearson Correlation	-.062	-.147	-.116	.326*	-.187
	Sig. (2-tailed)	.637	.263	.376	.011	.152
Degree	Pearson Correlation	.091	-.100	.060	-.016	.073
	Sig. (2-tailed)	.489	.446	.649	.903	.581
Special Educator (*n*=18)						
Years teaching	Pearson Correlation	-.110	.078	-.261	.198	-.138
	Sig. (2-tailed)	.663	.760	.296	.431	.585
Years current school	Pearson Correlation	-.513*	.049	-.036	-.027	-.132
	Sig. (2-tailed)	.030	.846	.888	.915	.601
Years current position	Pearson Correlation	-.557*	.150	-.134	.083	-.142
	Sig. (2-tailed)	.016	.551	.597	.743	.573
Student population	Pearson Correlation	-.132	-.168	-.283	.195	-.288
	Sig. (2-tailed)	.602	.505	.256	.439	.247
Age	Pearson Correlation	-.071	.063	-.138	.022	-.058
	Sig. (2-tailed)	.778	.805	.585	.932	.819
Degree	Pearson Correlation	-.431	.271	.050	-.234	.077
	Sig. (2-tailed)	.074	.276	.842	.350	.760

*Correlation is significant at the 0.05 level (2-tailed).

Summary

Significant findings of attitudes of all participant teachers (*n*=78) toward adoption of EBPs in this study are that (a) a negative correlation exists between the number of years participants taught within their current school and the likelihood of adopting EBPs when required to do so (r = -0.241, $p < 0.05$), (b) a negative correlation exists between the number of years participants taught within their current school and the overall scale score measuring likelihood of adopting EBPs *(*r = - 0.252, $p < 0.05$), (c) a negative correlation exists between the size of school population where participants teach and their openness to adopt of EBPs *(*r = -0.266, $p < 0.05$), (d) a negative correlation exists between the size of school population where participants teach and the overall scale score measuring likelihood of adopting EBPs (r = -.0.231, $p < 0.05$), and (e) a positive correlation exists between participant's age and perceived divergence of long-term teaching strategies with EBPs (r = 0.249, $p < 0.05$).

Significant findings of attitudes of regular education participants *(n*=60) toward adoption of EBPs in this study are that (a) a negative correlation exists between the number of years participants taught within their current school and the overall scale score measuring likelihood of adopting EBPs (r = -0.289, $p < 0.05$), (b) a negative correlation exists between the size of school population where participants teach and their openness to EBPs, and (c) a positive correlation exists between age and perceived divergence of long-term teaching strategies with EBPs (r = 0.307, $p < 0.05$).

Significant findings of attitudes of special education participants *(n*=18) toward adoption of EBPs in this study are that a negative correlation exists between the number

of years participants taught within their current school and teachers' perceived divergence of long-term teaching strategies with EBPs (r = -0.513, $p < 0.05$), and a negative correlation exists between the number of years participants taught in their current position and the likelihood of adopting EBPs when required to do so *(*r = -0.570, $p < 0.05$).

The next chapter will discuss the findings, conclusions, implications, limitations of the study, and recommendations for future research.

Chapter V

Conclusions

Summary

Public educators, challenged with new accountability standards that demand school improvement, are faced with the need to adopt innovative techniques or EBPs to address achievement gaps between students with and without disabilities, students of minority and majority groups, and students within and without poverty (Delisle & Yudin, 2014). The federal government has refocused compliance determination of schools with the Individuals with Disabilities Education Act (IDEA, 1975) and No Child Left Behind Act (NCLB, 2002) from strictly technical procedural indicators to results-driven accountability to address this achievement gap (Delisle & Yudin, 2014). Dissemination and implementation of EBPs to address achievement gaps are challenged by various factors and may, in part, be influenced by attitudes held by practitioners (Aarons, 2004).

The purpose of this study was to ascertain the overall attitudes of teachers toward adoption of EBPs. The EBPAS, developed by Aarons (2004) to measure attitudes of mental health practitioners toward adoption of EBPs, was modified and administered to regular and special education Pre-K through grade eight teachers from within the CESA 9 region of 22 public school districts. A total of 78 teachers responded to the questionnaire, including 60 regular education and 18 special education teachers. The EBPAS includes five scales, which are the (a) EBPAS total, (b) requirement, (c) appeal, (d) openness, and (e) divergence. Questions regarding individual teacher demographics were included in

the questionnaire, which identified (a) age, (b) educational attainment, (c) years of teaching service, (d) years of service teaching in their current school, (e) years of service teaching in their current position, (f) the number of students within the school where they teach, and (g) whether they were regular or special education teachers. Groupings of individual demographic characteristics were created to determine if there were correlations between them and the overall EBPAS and subscale scores.

This study sought to answer the research questions: What are the attitudes of teachers toward evidence-based practices? Are there relationships between attitude and individual teacher personal characteristics. When all teachers in the study are considered, both regular and special educators, results indicated that as years of service within a particular school increases, teachers were less likely to adopt EBPs generally. The most significant attitude subscale associated with years of service within a school when teachers would be required to implement EBPs by school authorities, marked by an attitudinal decrease in willingness. Results also indicated that as school enrollment size increases with number of students, teacher attitude toward adopting EBPs becomes less likely overall, and openness attitude decreases. Furthermore, as teacher age increases, their perception of the effectiveness or utility of EBPs diminishes from their established teaching practices.

Regular education teacher attitudes were affected by the number of years of service within their current school, in that as the number years of service increased in their current school, their overall attitude toward adoption of EBPs became less likely. Similarly, as the size of a school increased, there were fewer teachers with an openness in

their attitude toward adoption of EBPs. Additionally, regular education teacher perception, that EBPs were too divergent from established practices, increased along with their age.

Special educator attitude toward adoption of EBPs was negatively influenced as the number of years in their current school, and current position increased and there was a requirement to implement EBPs by school authorities.

The hypothesis that there is a relationship between age of teachers and willingness to adopt EBPs was accepted for regular educators, specifically that as they age, their perception of EBPs becomes more divergent from or less effective than their current established practices. No other comparisons yielded support for this hypothesis.

The hypothesis that there is a relationship between educational attainment and willingness to adopt EBPs was not supported for any comparisons. The hypothesis that there is a relationship between the number of years of service teaching and willingness to adopt EBPs was not supported for any comparisons.

The hypothesis that there is a relationship between the number of years of service teaching in a current school and willingness to adopt EBPs was supported in general for all educators, with results showing that as the number of years of service teaching in a current school increased, willingness to adopt EBPs decreased. More specifically, as number of years of service in a current school increased for special educators, teacher attitude toward adoption of EBPs decreased when required by school authorities to implement them.

The hypothesis that there is a relationship between number of years of service in one position and a willingness to adopt EBPs was supported for special educators, where results showed that as years of service increased in a current school increased, attitudes decreased when required to do so.

The hypothesis that there is a relationship between the number of students in a school and a willingness to adopt EBPs was supported in general among all teachers, where results showed that as student population increased, attitude toward adoption of EBPs decreased. Furthermore, as student population increased, the attitude of openness toward adoption of EBPs decreased for all educators in general and with regular educators specifically.

The most conclusive results of this study were that attitudes of teachers, in general, are influenced by years of service in a particular school and the number of students in a school. The age of a teacher influenced their perception of relevance of EBPs, years of service in their current school influenced their willingness to adopt required practices, and the size of the student population influenced their openness to innovative practices. Among regular educators, overall attitude was influenced by years of service in their current school, attitude of openness was influenced by size of student population, and perception of practice relevance was influenced by age. Among special educators, attitude related to adoption of required practice was influenced by years of service in their current school and years of service teaching in current assignment.

Discussion

Implications. In addition to determining the overall attitudes of teachers toward EBPs and the relationships between attitude and personal characteristics of teachers, the purpose of this study was to provide a means for technical assistance teams to gauge what level of support might be needed based on the individual or school profile of practitioners. As Fixsen et al. (2009a) discussed staff selection, and Blase et al. (2015) discussed technical assistance, knowing the teacher staff constituency regarding whether they are regular or special educators, their age, their years of teaching in a particular school, their years teaching in their current position, and the school enrollment size can provide direction in identifying individuals most likely to adopt EBPs.

Supporting Social Learning Theory (Bandura, 1971) and increasing teacher efficacy, selection of staff with willingness to engage in learning and implementing EBPs, will increase implementation fidelity and implementation survivability. As practitioners increase proficiency in a newly adopted EBP and positive student outcomes increase, teacher belief in their teaching efforts to affect student learning or self-efficacy increases (Bandura, 1984; Bandura, 1994; Hattie, 2012), which in turn generally fosters collective efficacy through collegial collaboration (Bandura, 1997; Goddard, 2001). As evidence for improved outcomes increases, colleagues of the high self-efficacy teacher who observe the practices associated with the improvements are more likely to adopt the practice (Bandura, 1971; Bandura, 1977). To foster high self-efficacy, collective efficacy, and, ultimately, improved student outcomes of achievement gap reduction, selection of staff with attitude traits conducive to adoption of innovative practices should be considered (Aarons, 2004; Blase et al., 2015; Fixsen et al., 2005).

The Integrated Theory of Change describes a multi-step process of goal setting to plan development, including outcome testing, which is incorporated into NIRN's process for evaluation and theory of action (Blase et al., 2015). Through the process, long-term goals are identified and through back-mapping, evidence-based interventions are selected, taking into account plausibility, feasibility, and testability, summarized in a logical plan (Taplin & Clark, 2012). The NIRN inserts an assessment of fidelity, a measurement of implementation integrity or verification that the evidence-based intervention has been implemented as designed (Blase et al., 2015). This process requires significant commitment to time and effort on the part of leaders and practitioners to remain engaged. Therefore, knowledge of attitudes toward adoption of EBPs may ensure, from the outset, that dedicated team members are selected, which should in turn expedite the change process and full implementation goal.

The antagonism described between practitioners and researchers in discourse theory is directly measured by the EBPAS subscale of divergence, which probes the practitioner's attitude toward EBPs developed by researchers. Discourse theory holds that communities are at least partly defined by the language they share, which includes more than spoken words between them (Gee, 1989). Communities share an identity of purpose and non-verbal language that is recognizable to the individuals within, and anyone not immediately recognized on an individual level who enters the community is tested for language traits associated with the community (Gee, 1989). In K-12 education, teachers identify researchers of EBPs as outside their discourse community, because researchers do not work in the real world of the K-12 classroom (Smith et al., 2013). Overall, there is

a distrust of researchers by K-12 educators resulting from a lack of shared values for the research process stemming from the divide between the discourse communities (Davis, 2007). Measuring teacher attitudes, specific to the teacher's perception of relevance of EBPs, compared with their current teaching practices, taps into the magnitude of the divide. This information can be used for both staff selection, as mentioned, and/or used to address the language barrier between the K-12 teachers and research community.

The utility of the findings from this study suggest that when school enrollment size, years of service of an individual teacher in a particular assignment, or age is known, technical assistance providers will be able to judge the level of willingness constituent teachers have toward adopting EBPs. Generally, as the number of students in a school, years of service of a teacher in an assignment, or the age of the teacher increases, willingness to adopt EBPs decreases. If it is known that there is an older teaching staff, the technical assistance provider might choose to select younger staff for an implementation team or administer the EBPAS to the entire staff to identify individuals with a low divergence and high openness or appeal subscale scores. Conversely, if the school staff is generally young, age 21 to 35, and has not had extended periods of teaching experience, fewer than ten, within a particular assignment or the school has a smaller student body, fewer than 400, the technical assistance provider might choose not to administer the EBPAS and assume there will be a relatively high level of willingness to implement an EBP.

Administering the EBPAS to the entire school teaching staff may be the most expeditious and least speculative way to determine the individual and collective

willingness to adopt EBPs and discern which of the attitude domains are most predominant among the staff. This determination could be valuable information utilized by the technical assistance provider to identify technical assistance intensity (Blase, 2009) and strategic focus area or areas, which may require their attention (Aarons, 2004). Addressing perception of relevance of EBPs to current education strategies being employed might be approached by exposing staff to EBPs which have been successfully implemented by colleagues in another school. This strategy may be especially effective if there is a generally high intuitive appeal rating among the staff, rather than attempting to use research to influence attitude. Conversely, if staff are less influenced by intuitive appeal, yet generally do not resist research derived practices, utilizing research information to make the case for adoption of the EBP might be preferable, particularly among younger teachers with fewer years in any particular school assignment or in lower student population schools. Because regular educators who have taught in one position for an extended period of time are not generally likely to adopt an EBP when required to do so, the technical assistance provider should not advocate for a mandated implementation of an innovative practice. On the other hand, mandatory adoption of an EBP among special educators might be an accepted implementation strategy under those same conditions.

Consistencies and Inconsistencies Related to Literature

Slightly higher than the estimates of 20% readiness to adopt initiatives, as reported by Laforge et al., (1999, p. 68) and Blase et al. (2015), roughly 30% of all

educators in this study reported a willingness to adopt EBPs *to a great extent*. When attitude is subcategorized, 26% of participants reported they would be willing to adopt new practices *to a very great extent* when they were required to do so.

In comparison with Gaughan's (2008) study, where special educators reported having a high regard for EBPs, a belief that EBPs should be a part of their practice, a belief that EBPs improve student outcomes, and that being familiar with educational research is important professionally, the majority of special education respondents' attitudes in this study reflect a moderate or slight willingness to adopt EBPs. As reflected by the divergence score of the special educators, which measures perception of relevance of EBPs, most had at least some resistance to accept researcher developed EBPs. However, when special education participants in this study were required to adopt EBPs or there was an intrinsic appeal, there was a greater likelihood to do so. Although not studied by Gaughan, it is interesting to note regular educators in this study reported a greater willingness to adopt EBPs than special educators did.

In comparison to Aaron's (2004) study of mental health provider attitudes toward EBPs, recency of the teacher's formal training experience did not reflect an increased willingness to adopt EBPs. Likewise, in contrast to Aaron's study, there was no relationship between willingness to adopt EBPs and educational attainment. However, like Aaron's findings, there were no significant differences in the overall ratings of attitudes between special and regular educators. The most significant influences found in this study on attitudes of teachers toward EBPs was the number of years a teacher was in a particular school and the number of students in a school.

Limitations

This study was limited by the size of the representative sample of participating teachers. Subgroups often had only one respondent, thereby making it impossible to derive any statistical data to test the validity, reliability, and effect size of certain independent variables. This limitation is most pronounced in the special educator participant number and valid comparisons between regular educators; therefore, special educator attitudes were unable to be ascertained. While individual characteristics, such as the regular education grade level teaching position, the category of special education teaching, and grade level teaching assignment were included in the survey, but respondents were too limited to create group comparisons.

Though the email containing the solicitation of teacher participation was sent to district administrators, with a request to forward on to targeted district teaching staff, some did not follow through with research protocol, while some delegated the task to a principal or other district leadership staff member. Given that the email was sent at the end of the school year, the number of unsolicited emails received by teachers was likely higher, and the resulting email overload may have reduced response rates (Sheehan, 2001). Additionally, there was no opportunity to send pre-notification and follow-up emails, which have been shown to improve response rates (Sheehan, 2001).

Delimitations

The scope of this study was geographically limited by design. As a matter of convenience, the pool of schools was limited to school districts within the cooperative

educational agency in the State of Wisconsin through which the researcher was employed. As a result, regional differences among teachers within the State of Wisconsin could not be ascertained. Therefore, results cannot be generalized beyond the region in which the study was conducted.

Furthermore, specialist educators, such as reading specialists, Title I teachers, music teachers, Spanish teachers, pupil service personnel (i.e. counselors and school psychologists), related service personnel, secondary teachers, and administrators were excluded from the study. While each of these disciplines is likely to reflect unique attitude profiles toward adoption of EBPs, the purpose of this study was to examine attitudes of teachers charged with the task of delivering classroom-based instruction in the elementary and middle school grades.

Recommendations for Future Research

Factors unexplored in this study were the relationships between those of organizational environments, such as climate, and teacher attitudes toward EBPs. For example, there may be demonstrable relationships between institutions that implement a greater or lesser amount of inclusionary practices of special education services within the regular education environment and attitudes toward EBPs. There may also be a relationship between organizational bureaucracy policies, either limiting or encouraging adoption of EBPs and teacher attitudes. Additionally, the relationship between school leadership characteristics of the schools and teacher attitudes were not studied. Furthermore, the number of improvement initiatives underway in a school was not

identified and may also be a factor associated with attitudes toward EBPs. Finally, while there may be an assumption that teacher self-efficacy and organizational factors may be associated with attitudes toward adoption of EBPs, it was not specifically tested in this study.

Although the theoretical constructs regarding social learning, integrated theory of change, discourse, and self-efficacy have provided frameworks for understanding how behavior might be influenced, specifically when adopting and implementing new or different ways of carrying out tasks such as teaching, few have addressed the specific reason why there may be resistance or compulsion to do so. This is particularly true of teacher practitioners. Fixsen et al. (2009a) and Blase et al. (2015) identified as one of the implementation drivers to implementation of EBPs, the need to be selective of personnel who are coachable or willing to take feedback when learning a new instructional intervention through role-playing and critique, but have not offered an assessment tool to quantify those qualities. Gaughan (2008) reported that special educators generally revere research-based intervention strategies, but did not investigate attitude towards implementing them. Locke et al. (2016) were the first to begin investigation into the attitudes of teachers toward EBPs in a yet to be published study of attitudes of teachers of children with autism toward EBPs, utilizing the EBPAS developed by Aarons (2004) in use with mental health providers.

Much has yet to be explored in the area of attitudes that influence adoption of EBP, as listed above in the limitations, delimitations, unexamined factors in this study, and in the body of research as a whole. In addition to taking measures to increase

response rates to surveys in general, further research should expand in assessment of the varied disciplines within elementary and secondary education. Factors that may be associated with teacher and other educator attitudes should be quantified and subjected to analysis, such as organizational characteristics of schools and school leadership influences. Finally, although the quantitative nature of the reviewed research literature and the data gathered in this study yielded insight into the what factors influence attitudes toward EBPs, there has been limited investigation into the direct relationship between self-efficacy and attitudes leading to the understanding of why or how these attitudes have formed. Further research is needed to test the tenants of discourse theory and attitudes through not only quantitative, but also qualitative methods. More specifically, inquiry into the questions of (a) why with increased age are teachers less willing to adopt EBPs; (b) why with increased years of service in one assignment are teachers less willing to adopt EBPs; and (c) why with increased school enrollment size are teachers less willing to adopt EBPs is recommended to advance practical strategies to address known barriers to adoption of EBPs.

Conclusion

Through a better understanding of the relationships between attitude and adoption of EBPs, implementation periods can be shortened, and most importantly, achievement gaps can be narrowed more quickly. By identifying the attitudinal barriers toward EBPs, implementation strategies can be tailored to focus efforts effectively, rather than employing unguided persuasion. The findings from this study are timely as states strive

for compliance with the federal requirements associated with results driven accountability. Given that Wisconsin has engaged in the process of scaling-up evidence-based practices since 2014, the findings of this study will be presented to the Wisconsin Department of Public Instruction Implementation Science Team, with the encouragement to consider the use of the EBPAS. Wisconsin's regional implementation teams' use of the EBPAS will provide individual and a school profiles to assist in the development of support strategy, as well as staff selection for team membership of EBP implementation. As mentioned above, regional implementation teams, made up of technical assistance providers, will be advised to assess the enrollment numbers within a school, and staff make-up, including age and years of service within the school. Infused within the processes of implementation science, utilization of the findings from this study can facilitate positive change of individual educator behavior through adoption of EBPs, leading to systemic and sustainable instructional practices, resulting in improved student outcomes and achievement gap closure.

APPENDIX A

Superintendent Letter of Approval for School District Participation

Teacher Attitudes Toward Evidence-Based Practices

You are invited to participate in a study of Teacher Attitudes Toward Evidence-Based Practices. This research study is under the direction of Joshua Garrison, PhD of the College of Education and Human at the University of Wisconsin Oshkosh. The purpose of the study is to measure 4K through Grade 8 teacher attitudes toward implementation of evidence-based practice in the rural schools of the Cooperative Educational Services Agency #9. The information gathered will ultimately lead to an indication of the type of technical assistance that will be needed to support schools seeking to adopt these practices.

If you decide to participate in this study, you will be asked to forward an email containing a link to an online survey to all Pre-K through 8 regular education classroom teachers and all special education teachers. If you prefer to assign the task of forwarding the email to a designee, please identify their name and contact information below. Each person who agrees to participate will complete a survey that will take approximately 5 minutes to answer 7 demographic and 15 professional practice questions.

There are no risks associated with participation. Members of the education community will benefit from the contribution made to the body of knowledge and potential uses applied to instructional improvements.

Data will be collected anonymously. At no time will personally identifiable data be known by the researchers. Individual responses will contain no personally identifiable information. All data will be stored in a two step password protected online account and on a separate external hard-drive locked in a fireproof safe-box. The presentation or publication of data will be presented in aggregate with no individually identifiable information. We will not release any information about you in any way or form that could identify you.

The consent process is designed to provide you with information regarding the experiment so you are able to provide an informed decision on whether or not to voluntarily participate. Your decision whether or not to participate will not affect your future relations with the University of Wisconsin Oshkosh in any way. If you decide to participate, you are free to discontinue participation at any time without affecting such relationship. The investigators, IRB members, and the University of Wisconsin Oshkosh are bound by ethics and law to protect participants in research studies. Participants do not waive any rights by signing the informed consent document.

If you have any questions about the research and/or research subjects' rights, please call or write Joshua Garrison, PhD at
920-424-0346, garrisoj@uwosh.edu. If you have any questions or concerns about the study or your rights as a research participant and would like to talk to someone other than the researcher, you may contact:

Chair, Institutional Review Board For Protection of Human Participants
c/o Office of Grants and Faculty Development UW Oshkosh
Oshkosh, WI 54901
(920) 424-1415

Although the chairperson may ask you for your name, all complaints are kept in confidence. You will be given a copy of this form to keep for your records.

You are making a decision whether or not to permit data collection. Your signature indicates you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

_____

_____

SIGNATURE DATE

_____

_____

SIGNATURE OF INVESTIGATOR DATE

APPENDIX B

Email to Prospective Participants

Dear Education Colleague,

You are invited to participate in a study of Teacher Attitudes Toward Evidence-Based Practices. This research study is under the direction of Josh Garrison, PhD of the College of Education and Human at the University of Wisconsin Oshkosh. The purpose of the study is to measure 4K through Grade 8 teacher attitudes toward implementation of evidence-based practice in the rural schools of the Cooperative Educational Services Agency #9. The information gathered will ultimately lead to an indication of the type of technical assistance that will be needed to support schools seeking to adopt these practices.

Your Superintendent has been informed of the research and has either forwarded this email on personally, or has had someone else in your district forward it on to you.

If you agree to participate in this study, you will be free to withdraw at any time. If you choose do not to participate you do not need to tell the researcher your reasons. If you decide to withdraw from the study, any information collected from you up to that point will be destroyed. Your choice to participate or not will have no effect on your relationship with the University of Wisconsin Oshkosh. The survey will take approximately 5 minutes to answer 7 demographic and 15 professional practice questions.

Data will be collected anonymously. At no time will personally identifiable data be known by the researchers. Individual responses will contain no personally identifiable information. All data will be stored in a two step password protected online account. In presentation or publication data will be presented in aggregate with no individually identifiable information. We will not release any information about you in any way or form that could identify you.

If you have any questions about this study, please contact:
Joshua Garrison, PhD
University of Wisconsin - Oshkosh
College of Education and Human Services
garrisoj@uwosh.edu
920-424-0346

Thank You,

Matthew C. Collins
Dissertator/Student Researcher
University of Wisconsin – Oshkosh
1833 Arrow Court
Arbor Vitae, WI 54568
715-614-6164

APPENDIX C

Participant Informed Consent and Survey

Attitudes of Teachers Toward Evidence-Based Practices

March, 2017
Attitudes of Teachers Toward Evidence-Based Practices
Principal Investigator - Josh Garrison, PhD
Dissertator/Student Researcher - Matthew C. Collins

The University of Wisconsin Oshkosh College of Education and Human Services supports the practice of protecting human participants in research. The following information is provided so that you can decide whether you wish to participate in this research study. Your participation is solicited but is strictly voluntary.

The purpose of the study is to measure 4K through Grade 8 teacher attitudes toward implementation of evidence-based practice in the rural schools of the Cooperative Educational Services Agency #9. The information gathered will ultimately lead to an indication of the type of technical assistance that will seeking to adopt these practices.

If you decide to participate in this study, you will be asked to answer the questions below. The survey will take approximately 5 minutes to answer 7 demographic and 15 professional practice questions.

There is no risk associated with participation. As a member of the education community, participants will benefit from the contribution made to the body of knowledge and potential uses applied to instructional improvements.

If you agree to participate in this study, you will be free to withdraw at any time. If you choose not to participate you do not need to tell the researcher your reasons. If you decide to withdraw from the study, any information collected from you up to that point will be destroyed. Your choice to participate or not will have no effect on your relationship with the University of Wisconsin Oshkosh.

Data will be collected anonymously . At no time will personally identifiable data be known by the researchers. Individual responses will contain no personally identifiable information. All data will be stored in a two step password protected online account. In presentation or publication data will be presented in aggregate with no individually identifiable information. We will not release any information about you in any way or form that could identify you.

If you have any questions about this study, please contact:

Joshua Garrison, PhD
University of Wisconsin - Oshkosh
College of Education and Human Services
garrisoj@uwosh.edu
920-424-0346

If you have any concerns or complaints about your treatment as a participant in this study, please contact:

Chair, Institutional Review Board
c/o Office of Grants and Faculty Development University of Wisconsin Oshkosh
800 Algoma Blvd
Oshkosh, WI 54901
920-424-3215

Although the chairperson may ask you for your name, all complaints are kept in confidence.

* Required

1. **I am 18 years old and have received an explanation of the study. I agree to participate. I understand that my participation in this study is strictly voluntary, and that I may withdraw at any time. If you disagree, you may select the "Disagree" option and close the browser by clicking the "X" on the associated tab.** *

Mark only one oval.

- ◯ Agree
- ◯ Disagree

Skip to question 2.

Demographic Survey

2. **1. Please check all that apply relative to your current teaching position:** *

Check all that apply.

- ☐ Regular Education Teacher
- ☐ Special Education Teacher - Learning Disabilities
- ☐ Special Education Teacher - Intellectual Disabilities
- ☐ Special Education Teacher - Emotionally Behaviorally Disturbed
- ☐ Special Education Teacher - Cross Categorical
- ☐ Special Education Teacher - Autism
- ☐ Pre-K Early Childhood
- ☐ Four year old Kindergarten
- ☐ Five year old Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grade 7
- ☐ Grade 8
- ☐ Other: _____

3. **2. How long have you been teaching?** *

Mark only one oval.

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years
- 20 years
- 21 years
- 22 years
- 23 years
- 24 years
- 25 years
- 26 years
- 27 years
- 28 years
- 29 years
- 30 years
- 31 years
- 32 years
- 33 years
- 34 years
- 35 years
- 36 years
- 37 years
- 38 years

- [ ] 39 years
- [ ] 40 years
- [ ] More than 40 years

4. **3. How long have you been teaching in your current school?** *

Mark only one oval.

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years
- 20 years
- 21 years
- 22 years
- 23 years
- 24 years
- 25 years
- 26 years
- 27 years
- 28 years
- 29 years
- 30 years
- 31 years
- 32 years
- 33 years
- 34 years
- 35 years
- 36 years
- 37 years
- 38 years

- [ ] 39 years
- [ ] 40 years
- [ ] More than 40 years

5. **4. How long have you been teaching in your current position?** *

Mark only one oval.

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years
- 20 years
- 21 years
- 22 years
- 23 years
- 24 years
- 25 years
- 26 years
- 27 years
- 28 years
- 29 years
- 30 years
- 31 years
- 32 years
- 33 years
- 34 years
- 35 years
- 36 years
- 37 years
- 38 years

- 39 years
- 40 years
- More than 40 years

6. **5. What is the approximate total student population of the school building where you teach?**
   Mark only one oval.

- 0 - 100 Students
- 101 - 200 Students
- 201 - 300 Students
- 301 - 400 Students
- 401 - 500 Students
- 501 - 600 Students
- 601 - 700 Students
- 701 - 800 Students
- 801 - 900 Students
- 901 - 1000 Students
- More than 1000 Students

7. **6. How old are you?** *

8. **7. What is your highest level of educational attainment?** *
   Mark only one oval.

- Bachelor's Degree
- Master's Degree
- Doctorate

Evidence-Based Practice Attitude Scale

INSTRUCTIONS: The following questions ask about your feelings about using new types of teaching methods, interventions or treatments. Manualized teaching intervention refers to any intervention that has specific guidelines and/or components that are outlined in a manual and/or to be followed in a structured or predetermined way. Indicate the extent to which you agree with each item using the following scale:

0	1	2	3	4
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

9. **Item 1: I like to use new types of methods/interventions to help my students.** *
   Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

10. **Item 2: I am willing to try new types of methods/ interventions even if I have to follow a teaching/training manual.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

11. **Item 3: I know better than academic researchers how to care for my students.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

12. **Item 4: I am willing to use new and different types of methods/interventions developed by researchers.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

13. **Item 5: Research based methods/interventions are not useful in practice.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

14. **Item 6: Teaching/classroom experience is more important than using manualized methods/interventions.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

15. **Item 7: I would not use manualized methods/interventions.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

16. **Item 8: I would try a new method/intervention even if it were very different from what I am used to doing.** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

For question 9 - 15: If you received training in a teaching method or intervention that was new to you, how likely would you be to adopt it if:

17. **Item 9: it was intuitively appealing?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

18. **Item 10: it "made sense" to you?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

19. **Item 11: it was required by your supervisor?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

20. **Item 12: it was required by your agency?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

21. **Item 13: it was required by your state?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

22. **Item 14: it was being used by colleagues who were happy with it?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

23. **Item 15: you felt you had enough training to use it correctly?** *
Mark only one oval.

- 0 - Not at All
- 1 - To a Slight Extent
- 2 - To a Moderate Extent
- 3 - To a Great Extent
- 4 - To a Very Great Extent

Thank you for taking the time to participate in this this survey.

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