

A STUDY OF VOLUNTARY STATE GUIDELINES FOR RELATED SERVICE
PROVISION

by

WENDY MARIE DUBNER

(Under the Direction of Elizabeth DeBray)

ABSTRACT

Occupational therapy (OT) is a profession that works in both medical and educational settings. The role of OT practitioners in schools is shaped by federal legislation and state regulations. The scope of practice and methods of service delivery differ between medically based and school-based OT. The diversity among practice settings can lead to confusion as to the appropriate role and scope of practice of OT in public schools. Thirty states have elected to craft written related service guidelines as a policy tool to further understanding of the role of OT in school-based practice and to facilitate parity of OT services across districts within a state.

The purposes of this cross-comparative study were (a) to examine the content of a sample of 12 state manuals using a researcher-developed rubric as a framework for evaluating policy comprehensiveness, (b) to distinguish commonalities and unique features among the sample states through document analysis, (c) to explore factors influencing states' decisions concerning adoption of written guidelines to provide direction on the role of OT in the public schools, and (d) to discover alternative methods states are using to guide related service provision.

Methodological approaches included document analysis, the collection of quantitative data on each sample state, and triangulation of data by verifying the currency of the documents and the accuracy of the findings with various state-level individuals involved in the decision concerning implementing written guidelines. The study incorporated concepts from policy diffusion theory to examine whether selected variables follow adoption patterns as established in the existing policy-diffusion research literature. Findings revealed significant content disparity existed among adopter states and nonadoption did not necessarily equate with state inaction. The tenets of policy diffusion examined in this study (geographic proximity and policy entrepreneur activity) were not definitively supported by the findings. The primary limitation potentially influencing the findings was lack of participant follow-up resulting in data gaps and the inability to include relevant statistical measures. Recommendations for future research and policy development focus on suggestions to expand this study and to further the understanding of the role and scope of practice of school-based OT at the national, state, local and individual levels.

INDEX WORDS: Related services, educational policy, state level guidelines,
 students with disabilities, occupational therapy, policy diffusion
 theory

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DEDICATION

I learned a dissertation isn't an individual accomplishment; it involves the concerted support of family, friends, volunteers, and skilled mentors. The heartache, headaches, and sweat equity necessary to cross the finish line of this marathon have no parallel. As I reach the conclusion of this chapter of my personal and professional growth, I eagerly anticipate finding where my future lies (as Sir Elton suggests) "beyond the yellow brick road." Although I predict I won't relocate to Oz and, sadly, ruby slippers aren't available in size 11, I hope to find myself in a position where I apply my acquired knowledge to improve educational services for children and families. I've learned fostering educational change is analogous to blow-drying a glacier. Let's hope the addition of 3 letters to my signature gives me more wattage (versus hot air) to affect meaningful change!

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CHAPTER 1

INTRODUCTION AND OVERVIEW OF THE STUDY

Background

In 2009, approximately 6.5 million students, 3-21 years of age, received special-education services under Part B of the Individuals with Disabilities Education Improvement Act (IDEIA; 2004) in the continental United States (U.S. Office of Special Education Programs, 2009). Special-education services include related services, such as physical and occupational therapy. Currently, the U.S. Department of Education does not collect separate data on the number of students aged 3-21 who receive related services (C. Bruce, personal communication, December 15, 2011). Historically, federal law pertaining to related services in public schools has focused on the provision of equal educational opportunities for students with disabilities, including access to both the physical educational environment and to the general educational curriculum. A focal shift in education occurred in 2002 with the passage of the No Child Left Behind Act (NCLB, formally the Elementary and Secondary Education Act). The educational priority became student achievement and establishing accountability standards for all students, including students with disabilities. Given the relatively new emphasis over the last 10 years on academic performance for students with disabilities, many educational personnel have experienced alterations in traditional roles as the need to improve achievement among students with a diverse range of disabilities has brought increased attention to the unique contributions various service providers can offer these students to

facilitate their mastery of academic standards. One educational discipline (also known as *ancillary or related services*) supporting children from birth to 3 years of age through early-intervention programs often funded by Part C of IDEIA and students aged 3-21 in both general and special education in a variety of contexts is occupational therapy (OT).

According to the U.S. Office of Special Education Programs (OSEP; 2009), the U.S. public school system (excluding outlying areas, such as American Samoa and Guam) employed approximately 19,000 occupational therapists. This number is more than double the number of physical therapists working in public schools. In addition, according to the results of a 2010 workforce study ($N = 9,910$) by the American Occupational Therapy Association (AOTA), 21.7% of occupational therapists and 21.4% of occupational therapy assistants practiced in schools (American Occupational Therapy Association [AOTA], 2010, p. 19). The National Coalition on Personnel Shortages in Special Education and Related Services (n.d.) reported a nationwide shortage in the number of occupational therapists in schools and an inadequate number of funded positions to meet the increased number of students requiring occupational therapy services in schools (see also Swinth, Chandler, Hanft, Jackson, & Shepherd, 2003). Furthermore, the U.S. Department of Labor, Bureau of Labor Statistics (2009) predicted a 26% increase in employment opportunities for occupational therapists from 2008-2018, a growth rate “much faster than average for all occupations”. The numbers indicate that special-education personnel play a significant role in the U.S. educational system.

Description of the Problem and Rationale for Proposed Study

“Job coach? Why do kids need a job coach?” For 22 years, I have fielded these questions from the parents of the children I work with in therapy, acquaintances, and

members of the general public when someone asks me to explain my profession, occupational therapy (OT). Somewhat proficient with word roots after a semester of Latin, I explained the word *occupation* means “activity” (“Occupation,” 1996) and comes from the Latin word *occupare* meaning “to seize or take control of,” connoting occupational therapy’s focus on helping individuals acquire or relearn life skills necessary to perform everyday tasks related to self-care, work, school, and leisure pursuits. Occupational therapists have expertise in modifying the environment or a specific task to promote the individual’s optimal level of performance as he or she fulfills various life roles.

Despite the present-day confusion about OT, the profession has roots in the treatment of the mentally ill beginning in the 1700s. OT experienced a surge in popularity along with physical therapy during World Wars I and II, particularly at the pinnacle of the Rehabilitation Movement spanning the 1940s-1960s. The passage of Education for All Handicapped Children Act in 1975 introduced OT into the public school system. Today, occupational therapists work in many contexts, including acute care and trauma centers, rehabilitation centers, nursing homes, neonatal intensive care units, schools, the industrial sector, and health and wellness programs. The diversity in the profession often results in misconceptions regarding the role and scope of practice of OT in various practice areas.

De Marrais and LeCompte (1995) used the work of Etzioni (1969) to characterize professions as classic or semi-professions. OT best fits Etzioni’s classic profession category defined by “the type, rigor and duration of training,” controlled entry into the profession by certification examinations, licensure, and continuing education

requirements; and the tendency for individuals in the category to have a “calling” to their chosen vocation (de Marrais & LeCompte, 1995, p. 131). OT is an entry-level master’s degree program of study and requires a minimum of 12 weeks of supervised internships. OTs must pass a national certification examination, hold state licenses (when applicable), and abide by each state’s continuing education requirements.

Although all OT and OT assistant programs are mandated to meet the accreditation requirements of the Accreditation Council for Occupational Therapy Education (ACOTE), there are no standards dictating the inclusion of certain practice areas, including school systems, in a program’s curriculum. Not only is there an absence of curricular requirements in OT and OTA preservice programs, but there is also no agreement concerning what baseline knowledge and skills a therapist needs to work in a school setting. Therefore, with the exception of programs offering an optional fieldwork practicum in an educational setting, a practitioner may successfully graduate from a program without receiving any formal training in school-based practice.

Occupational therapists face additional complications in defining their work when compared to physical therapy, because of OT’s broad scope of practice that encompasses activities of daily living, motor function, cognitive abilities, visual perception, leisure pursuits, vocational training, and wellness. Given the wide range of practice options, occupational therapists frequently discover their role in a specialized practice area is unclear both to themselves and to patients or students, families, and other professionals. Occupational therapists in public schools frequently experience compounded role ambiguity because they have one foot in the medical camp and one foot in the educational camp. This professional fence-straddling can result in role confusion as

individuals trained in a traditional medical field attempt to apply their knowledge and skills to an educational context.

Considering the murkiness surrounding the work context of related service providers in schools, there appears to be a substantiated need to identify and analyze existing strategies and mechanisms that seek to rectify this role ambiguity. Given that OT in schools represents approximately 21% of OT and certified OT assistant practice based on the results of a 2010 workforce study ($N = 9,910$) by the AOTA (2010, p. 8), it is critical that there is a general consensus and understanding of the role of occupational therapists and OT assistants in public schools. Swinth, Spencer, and Jackson (2007) remarked:

It is critical for school-based occupational therapists to have a good understanding of their professional domain of practice and expertise and to understand the policy context within which they work. IDEA and NCLB laws and regulations are essential reading for all school-based practitioners. (p. 10)

The primary federal laws governing related service provision in the public schools are IDEIA, NCLB, and Section 504 of the Rehabilitation Act of 1973. The original intent of both IDEIA and Section 504 was to provide students with disabilities access to a free and appropriate public education (FAPE) with the maximum degree of participation in the general-education curriculum appropriate to each student and his or her unique configuration of abilities and needs. By mandating accountability provisions designed to measure the academic achievement of all students, both NCLB and the 2004 reauthorization of IDEIA incorporated required measures of academic achievement for all students. This focus on a child's educational performance and the consideration of the educational relevance of the various services available to students through both IDEIA

and Section 504 differs from the emphasis and service delivery models of OT in the medical and private sectors.

In the medical sector, the therapeutic emphasis is on the restoration or optimization of a person's function that has been impeded by a disease or a disabling condition. In the private sector, therapy typically focuses on assisting children with maximizing their abilities across multiple contexts: home, school, social and leisure venues, and vocational settings. This variation in the purposes and objectives of OT services has the potential to cause confusion about the role of the occupational therapist in the public school setting. Parents, educators, administrators, colleagues, and therapists themselves may be unsure as to what constitutes educational performance for the student and educational relevance as related to OT service delivery.

The profession's broad scope of practice and its dual participation in both the medical and educational communities contribute to the confusion surrounding the appropriate role and scope of practice of OTs in an educational context. A term describing this role ambiguity is *liminality*, a state in which a person or thing (in this case, a profession) does not have a clearly established position within an existing social or organizational structure. The most recognized theorist studying liminality was Victor Turner, a cultural anthropologist, who expanded the theory of liminality in the late 1960s to apply to various cultural contexts (La Shure, 2005). Turner (1969) described liminal individuals or entities as structurally invisible: "neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremony" (as cited in La Shure, 2005).

In addition to federal legislation, which mandates that students receive related services if they qualify under the provisions of an applicable law, most states have enacted state-level regulations or policies pertaining to OT, including state licensure laws, practice acts, or administrative codes, in an effort to clarify the role of related service providers in the public schools. Some states require school-based therapists to hold specialized licenses, such as Wisconsin, which requires OTs practicing in educational settings to hold a license from the Department of Public Instruction (WI Department of Public Instruction [DPI], 2011). Currently, 30 states have voluntarily published some form of written guidelines for related service provision in the public schools, 25 within the last 10 years. Although there are federal laws and state regulations pertaining to school-based OT, no mandates or laws exist requiring specific preservice preparation, nor are there established parameters defining what is and what is not school-based OT. As noted previously, the only consistent nationally mandated criterion for OT is that practitioners must pass a national certification examination after graduation. Currently, 48 of the 50 states and the District of Columbia require state licensure, the exceptions being Colorado and Hawaii (Buckner, 2012). Additionally, there is no nationally endorsed template or content standards for related service provision guidelines, nor are states mandated to provide such guidance.

Purpose and Research Questions

The purposes of this cross-comparative study were (a) to evaluate the comprehensiveness of states' policies on related service provision by examining the content of sample state manuals published in the last 10 years, using an author-developed rubric of seven variables as a framework for a count-model analysis to determine criteria

each state included in its written guidelines; (b) to distinguish both commonalities and unique features among the sample states through a detailed document analysis; and (c) to explore factors influencing states' decisions to adopt or not to adopt written guidelines to provide direction on the role of OTs and OTAs in the public schools. Methodological approaches included document analysis, collection of quantitative data on each state in the sample, and triangulation of data by verifying the currency of the documents and the accuracy of the findings with various state-level personnel who have a vested interest in the written guidelines. Potential participants included state department of education employees, OTs serving as voluntary state association board members, OTs working in public schools, members of the OT licensure board, and members of voluntary school-based practice associations or committees. The proposed study incorporated concepts from policy diffusion theory to guide the examination of selected variables related to state-policy adoption to investigate whether, in this policy context, the factors followed adoption patterns established in the existing research literature on state-level policy diffusion. The questions guiding the research study included the following:

RQ1. According to the rubric constructed by the researcher, what is the quality of the content of the written guidelines?

RQ2. What are the common features of the contents of the written guidelines in this research sample?

RQ3. What are the factors affecting a specific state's decision to adopt or not to adopt written guidelines for related service provision?

RQ4. Are nonadopting states implementing alternative mechanisms to guide school-based practice?

RQ5. Using the theory of policy diffusion as a guide, do the variables of geographic proximity and the activities of a policy entrepreneur influence a state's policy decisions concerning the implementation of written related service guidelines in a manner consistent with the policy adoption patterns for these variables substantiated in the existing research literature?

Significance and Implications

State-level policies for related service provision have neglected to attract significant research attention to date. For his master's thesis, Findon (1989), a physical therapist in Montana, conducted a survey of physical and occupational therapists in the state of Montana to determine patterns of service delivery in the state's public schools. Although not the focus of his research study, he included one question asking whether therapists were aware of the state's related service guidelines and whether they used the guidelines to assist them with making decisions regarding which students qualify for therapy services. He received 100 of the 346 surveys distributed, for a response rate of 28.9% (Findon, 1989). Specific to the inquiry regarding awareness and use of Montana's state guidelines, of the responding therapists, 87.5% of physical therapists and 94.1% of occupational therapists reported they knew about the guidelines. In addition, 50% of physical therapists and 52.9% of occupational therapists reported they used the guidelines when making decisions regarding eligibility for services (Findon, 1989).

Furthermore, Carr (1990) surveyed state chief education officers to determine the number of states that had developed guidelines after the passage of the Education for All Handicapped Children Act in 1975. Her findings revealed that 18 states were developing or had compiled guidelines, 26 states had no guidelines, and six states did not respond

(Carr, 1990). Currently, 30 states have guidelines, with 24 published in the last 10 years since the most recent reauthorization of IDEIA in 2004 and the authorization of NCLB in 2002. Thus, an increasing number of states have adopted some formalized guidelines to direct school-based practice, indicating that providing some type of state-level guidance has gained traction as a relevant policy issue since the publication of Carr's research over 20 years ago.

Finally, Brandenburger-Shasby (2005) conducted a 25-question survey of 1102 school-based occupational therapists in 2005. The response rate was 41% ($n = 450$). Her findings revealed that 80% of respondents reported that they did not feel prepared for school-based practice "based on entry-level education alone" (p. 92). Furthermore, of the 63% of the respondents who worked in states with existing guidelines for school-based practice, 16% reported they had not reviewed the guidelines, and 6% were not sure whether state-level guidelines were codified in their state. Concerning understanding federal and state laws and regulations directing practice, only 30% of the respondents reported feeling prepared in this area after completing an entry-level educational program, and 26% reported this as an area of need for continuing education. Brandenburger-Shasby concluded that, given the number of therapists in the survey who (a) were unaware of or unfamiliar with their state practice guidelines and (b) expressed the need for improved understanding of federal and state mandates related to school-based practice by ranking this topic in the top six identified continuing education needs, "therapists seem unaware of . . . the value of state guidelines for defining practice" (Brandenburger-Shasby, 2005, p. 93).

None of these studies examined the content of the manuals involved in the studies, nor did the researchers attempt to identify variables influencing a state's decision to adopt or not to adopt written guidelines for related service provision. Thus, this present study fills a gap in the existing literature by providing both a rich description and analysis of the contents of a sample of state manuals and by exploring factors that may affect states' decisions to adopt written guidelines or to select alternative methods of providing guidance on the delivery of related services.

The findings of this present research may be useful to a variety of organizations, including state departments of education considering adopting or revising existing guidelines or the AOTA, who may elect to craft a template, a common set of standards, or a topical outline to assist states in drafting guidelines and to facilitate content consistency across states. Moreover, researchers and state departments of education, which typically provide the fiscal support for authoring, disseminating, and implementing the guidelines, may use these findings to validate the need for an impact study to determine various stakeholders' perceptions of the applicability and benefit of existing state guidelines. Policy researchers may discover new factors that potentially influence policy making at the state level related to education in general and, more specifically, to special education. Finally, data from a sample of nonadoption states may illuminate reasons that states have elected either not to adopt written guidelines for related service provision or not to update outdated guidelines (over 10 years old), providing further insight into the decision-making process of state-level policy makers. As Ingle, Cohen-Vogel, and Hughes (2007) noted, "[R]elatively few political scientists have given systematic consideration to non-adoption" (p. 607), corroborating this present study's

potential contribution to the existing policy literature, specifically in the areas of policy transfer and diffusion.

Overview of the Research Procedures

This study was conducted in three parts: (a) a cross-comparative content analysis of a sample group of states with current (published within the last 10 years) written guidelines for related service provision, (b) a fact-checking inquiry with representatives from the adopter sample of states and representatives of a sample group of states with outdated manuals or no evidence of an existing manual (categorized as *nonadopters*), and (c) collection of quantitative data on states in both groups using tenets of policy diffusion theory as the basis for selecting appropriate variables for analysis. The first part involved using a rubric developed for this study as the basis for content analysis in a comparison of state-level written guidelines, published within the last 10 years, for related service provision in the public schools. For this part of the study, the sample size included 12 states with guidelines specific to the provision of OT services in the public schools. When possible, the sample of 12 states constituting the adopter group represented diverse geographic regions and population demographics. This study excluded states with manuals that addressed special education generally or that only reflected the verbiage of federal laws because the manuals' limited content scope did not lend them to the content analysis pertinent to this study.

In this part of the study, a rubric developed by the researcher and comprised of seven variables scored on a scale of 0-2 was used as a framework for comparing the contents of written guidelines of the states in the adopter sample group. Chapter 3 details each of the variables and the scoring system. The rubric served as an organizing

framework to analyze the written content of the state-level guidelines and to assist with the identification of commonalities and areas of discrepancy between adopting states and to illuminate exceptional or innovative features included in a state's approach to providing guidance on related service delivery in public schools. The researcher triangulated the information culled during the document analysis by conferring with state-level individuals representing organizations involved in the formation of the documents to ensure the researcher accessed the most current version of the guidelines and to verify whether supporting supplemental materials that include guidelines related to OT school-based practice existed.

In addition to examining the content of a sample of state manuals published within the last 10 years, this study also sampled a group of six nonadopting states, identified as states that either (a) had guidelines with publication dates more than 10 years old or (b) had no evidence of ever publishing guidelines for related service provision. The intent of this inquiry was to check that the researcher had not overlooked an existing document or that a document existed but was undergoing revision so was not publicly accessible at that time. This fact-checking process also served to clarify why some states had opted not to adopt or update written guidelines and to determine whether states were implementing alternative methods to regulate or guide related service provision.

Finally, the theory of policy diffusion served as a theoretical lens providing a rationale for collecting quantitative data from the sample states for both the adopter and nonadopter groups to determine whether the states included in this study followed the patterns of adoption characterized in the existing research literature on state-level policy

diffusion. The policy diffusion literature has identified several variables as favorably influencing a state's decision to adopt a particular policy, including internal characteristics of the state, economic competition between states, the actions of neighboring states, and the effects of professional organizations. For this study, the researcher decided to examine whether the variables of geographic proximity and the activities of a policy entrepreneur affected a state's decision to adopt written guidelines because these seemed the most applicable of the identified factors.

Organization of the Dissertation

Chapter 1 describes the purpose of the study, the background and rationale for the study, the research questions, the significance and possible implications of the research, and an overview of the methodological procedures. Chapter 2 is composed of two sections. The first section provides a synopsis of the relevant literature describing general national-level laws and policy positions on the role of OT in public schools. The second section constitutes an overview of policy diffusion theory with an emphasis on the tenets of the theory germane to this study. Chapter 3 includes descriptions of the research methods, including a description of the data-collection process, analysis procedures, and use of rubrics as a policy evaluation tool. Discussions of methods of data triangulation and study limitations will conclude the chapter. Chapter 4 will include discussion of the results of the content analysis and data triangulation methods, including information gleaned by questioning various individuals from organizations involved with the formation or implementation of the state-level guidelines for the sample adopter states.

Chapter 5 includes discussion of information provided by individuals from the nonadopter states with the intention of contributing to an improved understanding of

factors influencing states not to update or revise outdated guidelines or their decisions to implement policy alternatives for regulating school-based OT intervention. Chapter 6 consists of details of the analysis of variables documented in the literature and found to correlate with state-policy diffusion and adoption and applicability of those principles to the states included in this study. Chapter 7 includes a summary of the findings, suggestions for future research, and suggestions for policy makers involved in crafting regulations or guidelines for delivery of OT services in public schools.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Overview

The purposes of this study were (a) to evaluate the comprehensiveness of states' policies on related service provision by examining the content of a sample of state manuals published in the last 10 years, using an author-developed rubric of seven variables as a framework for a count-model analysis to determine the criteria each state included in its written guidelines; (b) to distinguish both commonalities and unique features among the sample states through a detailed document analysis; and (c) to explore factors influencing states' decisions to adopt or not to adopt a written set of guidelines to provide direction on the role of OTs and OTAs in the public schools.

The research questions guiding this study were as follows:

RQ1. According to the rubric constructed by the researcher, what is the quality of the content of the written guidelines?

RQ2. What are the common features of the contents of the written guidelines in this research sample?

RQ3. What are the factors affecting a specific state's decision to adopt or not to adopt written guidelines for related service provision?

RQ4. Are nonadopting states implementing alternative mechanisms to guide school-based practice?

RQ5. Using the theory of policy diffusion as a guide, do the variables of geographic proximity and the activities of a policy entrepreneur influence a state's policy decisions concerning the implementation of written related service guidelines in a manner consistent with the policy adoption patterns for these variables substantiated in the existing research literature?

The researcher endeavored to answer these questions by reviewing the content of a sample of 12 state manuals and any relevant supplemental materials, having informal discussions with state-level representatives from various organizations from both adopting and nonadopting states, and analyzing selected policy diffusion parameters in both the adoption and nonadoption sample states. The literature review in this chapter includes literature on the laws and policies that affect the delivery of related services in public schools and a discussion of policy diffusion theory, with an emphasis on the two variables (geographic proximity and presence of a policy entrepreneur) selected for this study.

Overview of National Legal and Policy Influences on Related Service Provision

Three federal laws have broad implications for providing related services in public schools: the IDEIA, Section 504 of the Rehabilitation Act of 1973, and NCLB. Other laws and programs affecting related service provision to a lesser extent include the Americans with Disabilities Act (ADA), Title XIX of the Social Security Act of 1965, Improving Head Start for School Readiness Act of 2007, the Assistive Technology Act of 2004, and the U.S. Department of Agriculture Food and Nutrition Service (2001). Congress enacted IDEIA (originally the Education for All Handicapped Children Act) in 1975. The initial impetus for the law stemmed from a historical tendency of public

schools to deny access to a public education and associated services to children with disabilities. The primary purpose of the law was to ensure that students 3-21 years of age who were in one of 13 specific disability categories received a free and appropriate education (FAPE) in the least restrictive environment (LRE). Thus, all students must have access to public education, regardless of the nature or the severity of their disability, and these students must participate in the general education curriculum with non-disabled peers as much as possible. To achieve a FAPE in the LRE, the law mandates that qualifying students receive OT services (one of several professions labeled “related service providers”) to facilitate their educational performance (Manasevit & Maginnis, 2005).

The basic purpose of OT in the school context is to work with the student, district personnel, and the community to “support student engagement in occupation” (Hollenbeck, 2007). IDEIA 2004 emphasized developmental and school readiness, student achievement, and student success. Jackson (2007) stressed the appropriateness of the role of OT in serving students in both general and special education in a continuum of programs by indicating a central question of IDEIA is “[h]ow is occupational therapy relevant to learning and behavior for *all* children, not just those with disabilities?” (p. 2). A significant addition to the 2004 IDEIA reauthorization addressing Jackson’s rhetorical question is the process termed *response to intervention* (RTI), an option for schools to institute a concatenation of programs to provide increasingly intensive levels and amounts of supports and services to students struggling in the general-education setting. One intended consequence of RTI is to identify students early and provide appropriate interventions in hopes of facilitating their success in the general-education environment, resulting in a decrease in the number of special-education referrals. As an incentive to

implement a RTI program, IDEIA 2004 permits states to use up to 15% of their allocated federal special-education funds for early intervening services (EIS) for at-risk students. Services may include professional development for educational personnel on scientifically based academic and behavioral interventions; training on evidence-based literacy instructional programs; and provision of educational evaluations, services, and support, including related services.

In addition to IDEIA, students may also access related services through a Section 504 Plan. Section 504 applies to all recipients of federal funds, including public schools. Section 504 is primarily a civil rights act, designed to provide accommodations and services to any person “who has a physical or mental impairment that substantially limits one or more major life activities” (Jackson, 2007, p. 5). Major life activities include “education and learning, caring for oneself, performing manual tasks, walking, seeing, hearing, speaking and working” (Jackson, 2007, p. 5). Students who qualify for services under Section 504, like students who qualify for services under IDEIA, are guaranteed a FAPE, which may include “provision of regular or special education and related aids and services designed to meet the student’s individual educational needs as adequately as the needs of nondisabled students are met” (U.S. Office of Civil Rights, 2011). A common scenario for a student who may qualify for OT services under Section 504 is a student in general education with a sensory processing disorder. For example, a second-grade male student who cannot remain seated during instructional time, fidgets when completing written work, and experiences “melt downs” resulting in “breaks” in the principal’s office when he experiences frustration or becomes overwhelmed over the course of the school day may benefit from an OT evaluation and implementation of various sensory strategies

to assist the student with regulating his attention and behavior, facilitating his ability to attend to classroom instruction and complete his assigned work.

The No Child Left Behind Act of 2002 requires that states implement standardized testing and other forms of data collection to measure the academic progress of all students, including students with disabilities. Ninety-five percent of students must participate in the statewide assessments. If less than 95% of a school's students in a given subgroup do not participate in the assessment, the school fails to make Adequate Yearly Progress (AYP) and risks federal sanctions of increasing severity. Students with identified disabilities may take the regular assessment with accommodations or take an alternate assessment that measures their performance using grade-level standards. A school may permit students with severe cognitive disabilities to take an alternate assessment based on alternate achievement standards. When calculating AYP, each school is permitted to count 1% of students' scores denoted as "proficient" or "advanced" using the alternate achievement standards. One of the overarching objectives of these laws is to ensure that all children with disabilities participate in an educational program tailored to meet their unique needs, enabling them to acquire the skills they need in preparation for future education, technical or vocational training, employment, and acquisition of various self-care and life skills. OTs may provide consulting services to evaluate various options for student testing accommodations, including alternate seating or adaptive equipment to facilitate a student's successful participation in mandated standardized testing.

AOTA (Frolek-Clark, Jackson & Polichino, 2011) has cited several other federal laws that provide a legal rationale for the role of OT in public schools. For example, OTs

can facilitate students' physical access to the school environment to assist schools in complying with the ADA; provide assessment, consultation, and direct services to disadvantaged children ages 3-5 under Title XIX of the Social Security Act of 1965 and Improving Head Start for School Readiness Act of 2007; and work with the student, family, and educational personnel to implement the use of technology-access devices and computer software that enhance children's ability to participate in classroom activities and complete assigned work (Assistive Technology Act of 2004). Further, OTs may consult with nutritionists, dietary staff, P.E. teachers, and administrators at the district level to develop and implement a district-wide program to reduce risk factors for childhood obesity and to promote a healthy lifestyle by assisting students with making nutritious food choices and engaging in a physical exercise program, using the expertise of the occupational therapist to adapt or modify the standard curriculum for each student as needed.

AOTA advocates for the profession at the national level by providing educational materials on various aspects of school-based practice through a number of venues: continuing education publications, CDs, and webinars; journal articles; a web-based *Evidence Based Practice Resource Directory*; provision of an early intervention and school-system special-interest group, including a newsletter and access to a group blog; and copious fact and tip sheets available on the AOTA website. These various forms of media not only explain the link between federal laws and school-based practice but also detail the scope of practice of OT, both generally and in educational settings.

AOTA has authored three documents describing the purview of the profession of OT. AOTA's Commission on Practice developed a practice framework, including both

the domain and process of OT in 2002 with revisions in 2008 (known as *Framework-II*). The purpose of the framework is “to articulate occupational therapy’s contribution to promoting the health and participation of people, organizations, and populations through engagement in occupation” (AOTA, 2008, p. 625). The domain “outlines the profession’s purview” and its “transactional relationship” with the process of OT, which evaluates the client’s occupational performance “resulting from the dynamic interaction of the client, the context and environment, and the client’s occupations” (AOTA, 2008, pp. 625-626).

Framework II, though general, is clearly relevant to school-based practice. First, it highlighted the importance of the client and how occupational therapists may simultaneously serve multiple clients (e.g., the student, the teacher, the district, and the educational system). Second, it described the complexity of the evaluation process, which encompasses an evaluation of not only the client’s performance skills but also barriers to performance, the activity demands, and the context in which the client performs the activity. Framework-II addressed the intricate process involved in OT practitioners determining each individual’s unique set of challenges and the supports the individual needs to fulfill life roles and engage in desired or required occupations. For example, an OT working in a school system has to be familiar with federal and state laws and regulations influencing practice, the district and school cultures, and the school district’s policies and procedures. In addition, an OT should be aware of the knowledge base of other professionals in the district, their roles, and their expectations of OT staff, as well as their prior experiences and comfort levels with the rationale for and implementation of OT-intervention strategies. Finally, OTs must know how to work

effectively with teams and know strategies to use when teams are not working collaboratively, as well as understand families' concerns and goals for their child, the students' goals and concerns (when appropriate), cultural variables, and the various student-specific factors affecting their educational performance.

Framework-II explained the evaluation process and detailed how an occupational therapist may synthesize evaluation findings to develop an intervention plan. After assessing the needs of the client (whether an individual, classroom, teacher, school, or district), the OT collects data on existing resources, programs, and interventions already in place, examines the degree of their effectiveness, and identifies factors hindering the achievement of desired outcomes. The therapist then designs an intervention plan in collaboration with appropriate team members to “modify the environment/contexts and activity demands or patterns, promoting health, establishing or restoring and maintaining occupational performance, and preventing further disability and occupational performance problems” (AOTA, 2008, p. 652).

The outcomes of the intervention vary and are somewhat dependent on the client. For an individual, the results of OT intervention may include “improved confidence, hope, playfulness, self-efficacy, sustainability of valued occupations, resilience, or perceived well-being” (AOTA 2008, p. 661). For organizations, successful outcomes may involve “increased workplace morale, productivity, reduced injuries,” and for populations, results may include “health promotion, social justice and access to services” (AOTA, 2008, p. 661).

In 2005, AOTA's Commission on Practice revised the scope of practice statement for the profession and clearly defined the domain of OT as the “therapeutic use of

everyday life activities” to facilitate individuals’ performance to assist them in participating in a variety of life roles across situations and contexts (AOTA, 2005, p. 2). Examples include providing a wheelchair-bound student with adaptive equipment so she can transport books and supplies, access out-of-reach objects, or use an adapted keyboard to complete assignments in a computer lab and working with the school social worker to develop a social skills group. Therapists may work with clients on performing a specific activity, sometimes with modifications, or intervention may be focused on helping the client gain the underlying skills necessary to performing a task (e.g., building hand strength, improving motor coordination, or adapting daily routines). Consistent with the content in the framework, the scope of practice describes the process of OT as evaluating a client’s occupational performance; determining what barriers exist to achieving desired tasks; learning the client’s (and his or her family’s) objectives; and collaborating with the client, family, and personnel from other disciplines to coordinate an intervention plan with targeted outcomes that may include “role competence and adaptation, health and wellness, quality of life and satisfaction, and prevention initiatives” (AOTA, 2002, p. 619).

In addition to implementing Framework-II and the scope of practice for providing OT services, AOTA charges OTs and OTAs with using the *Standards of Practice for Occupational Therapy* as “minimum standards” for guiding service delivery (DeLany et al., 2010, p. 415). The practice standards define the purposes of OT services as promoting health and wellness for those who have or are at risk for developing an illness, injury, disease, disorder, condition, impairment, disability, activity limitation, or participation restriction. Occupational therapy addresses physical, cognitive,

psychosocial, sensory, communication, and other areas of performance in various contexts and environments in everyday life activities that affect health, well-being, and quality of life (DeLany et al., 2010, p. 415).

In 2011, AOTA published guidelines titled *Occupational Therapy Services in Early Childhood and School-Based Settings* (Frolek-Clark, Jackson, & Polichino, 2011) delineating the role of OT in both early intervention and school-based settings. The document emphasized that OTs work with children and youth who are either at-risk or have various challenges in performing activities of daily living. Jackson (2007) described the present and future role of OT in schools as working with students “emphasiz[ing] their participation in day-to-day activities and role development [in different environments] thereby supporting the child’s or youth’s occupational competence and performance in contemporary society” (p. vii). A student’s occupational competence may be compromised because of a variety of factors: physical function, poor mental health, a mismatch between the student’s learning style and the classroom setting, a need for activity modification or adaptation, sensory-processing issues that interfere with the student’s ability to learn, or psychosocial issues stemming from the child’s home environment. Occupational therapists not only provide “hands-on” services to students but also play an integral role in program development, implementation and, evaluation. Examples of OT in schools include the following:

- Working with a district committee to develop and implement a kindergarten-readiness screening for all incoming kindergarten students to evaluate their motor, self-help, social, and cognitive skills;
- Participating in RTI and EIS programs;

- Consulting with teachers to identify issues related to handwriting: legibility, work speed, copying accuracy, letter formation/characteristics (e.g. size, spacing);
- Working with a district to set up prevocational training fieldwork sites, including assessing the skills students need to complete the jobs at each site;
- Collaborating with the physical therapist to develop a play-skills group for pre-K through second grade to assist children with developing the motor skills necessary to participate successfully in group games and access playground equipment;
- Participating in the district's implementation of a positive behavioral and intervention supports program;
- Writing a grant to pilot an interdisciplinary vision-screening program with an optometrist to identify students with visual acuity deficits, decreased oculomotor control, and other vision disorders (e.g., esotropia, strabismus) and providing identified students with appropriate intervention to address visual problems that could contribute to current or future learning issues (e.g., difficulty learning to read, write, or copy from the board; decreased visual attention or memory);
- Participating in a district-wide task force to implement an evidence-based bullying prevention program.

Although some districts support the role of OT in emerging practice areas in schools, many districts are unaware of or lack the administrative and fiscal support for expanding the role of occupational therapists. Examples of emerging school-based

practice areas supported by IDEIA (see Jackson, 2007, pp. 14-15) are participation in EIS or RTI programs, involvement in obesity prevention and bully awareness and prevention initiatives, and inclusion as team members on high school programs geared to assist students with transitioning to postsecondary education or vocational training. Swinth et al. (2007) reiterated this point, commenting that both IDEIA and NCLB require educational personnel understand

the importance of post-school outcomes as a measure of education effectiveness cannot be overstated . . . during high school and as students prepare to leave the public education system; the special education team must increase its focus on preparing students to make the transition to post-school roles and activities. (p. 10)

The Role of National Laws and Policies Applied to this Research

OT has the potential to make a valuable contribution to the education of children of all ages with a diverse range of needs. Federal law mandates the provision of related services in schools, including OT, and provides significant funding for special education. Recently, the federal government has permitted states to allocate up to 15% of their Part B IDEIA funds for programs and training to assist academically at-risk students and to facilitate identifying these students before they fail or before they are potentially referred for a comprehensive special-education evaluation. AOTA has engaged in numerous public-awareness efforts to educate both professional and consumer groups about the profession. What remains unclear is whether states are tapping into these valuable resources when they craft their state-specific guidelines. One facet of this study was to examine whether states are using AOTA documents as references when formulating their state-specific guidelines for school-based practice. This study also delved into whether states are including local policy entrepreneurs, who frequently would have formal or

informal connections to the national association, to determine whether states are availing themselves of these experts to assist with composing state guidelines.

Policy Diffusion Theory

Policy diffusion theory provides a useful framework for examining factors influencing whether a state elects to adopt a specific policy and when the state makes its decision regarding the policy. One element of policy diffusion is innovativeness, the rate at which a state adopts a policy. States among the first to adopt a specific policy are referred to as *policy pioneers*, *bellwether states*, or *leader states* (Cohen-Vogel & Ingle, 2007; Walker, 1969). The policy field generally credits Walker for his formative work on innovation, which he defined as “a policy that is perceived as new to the unit adopting it regardless of its age, whether it exists elsewhere, or how many other units have adopted it” (Walker, 1969, p. 881, as cited by Cohen-Vogel & Ingle, 2007, p. 241). Walker’s seminal research examined the time a state adopted a policy, comparing each state’s adoption date to the time the first state adopted a given policy by analyzing state adoption dates for 88 different policies representing a broad spectrum of policy areas (e.g., health, education, conservation, and transportation). He then gave each state an innovation score. Walker found that three variables tend to correlate with the degree of a state’s innovativeness: the population size, the population diversity, and the per capita income, determinants he called “slack resources” (1969, p. 883). Walker hypothesized that states with surplus human and fiscal capital “can afford the luxury of experiment and can more easily risk the possibility of failure” (p. 883).

Building on the work of Walker (1969), who found that states with similar “environmental conditions” display “similar innovation rates” (as cited in Foster, 1978,

p. 180), Foster proposed that, alternatively, states may learn of a neighbor's policy innovation and be compelled to take action. Conversely, a state may justify its own inertia by comparing itself to its neighbor states that also are maintaining the status quo. Foster calculated an analysis of the variance of Walker's four initial variables: "high urbanization, industrialization, population and equitable apportionment of urban areas" (Foster, 1978, p. 180) and found that they explained 73% of the variance, leaving 27% of the variance between regions because of "residuals" (p. 182). Foster discovered that clusters of states in geographic proximity to one another (upper midwest and plains, Pacific coast and northwest, border and lower Great Lakes, and southern) innovated at similar rates.

In addition to his findings on innovation, Walker (1969) found states tend to emulate the behavior of one another for a variety of reasons. Newmark (2002) defined *emulation* as "a starting point for best policy, but it allows for adjustment to suit varying needs of the adopter" (p. 156) to differentiate emulation from copying, in which a state adopts an existing policy verbatim. Often states engage in "lesson drawing" (Newmark, 2002, p. 154), in which they monitor a state (optimally, one that is ideologically similar) to see how that state resolves policy issues and what policy actions the state takes to address the problem. The observing state can then determine the policy's effectiveness and assess the intended and unintended consequences, including the social, economic, and political effects. Walker explained that decision makers typically have to sift through large quantities of data and there is simply no way an individual can comb through all of the relevant literature to form an educated opinion about which available policy alternatives may be a best fit for a state's unique circumstances. Emulating a state that

has a similar demographic or ideological composition or customizing a policy that appeared successful in another state provides a short cut for decision makers to enact policy, as Newmark put it, to “avoid reinventing the wheel where solutions to problems may already exist” (p. 154). The number of states adopting a policy also can cause emulation because “hold-out” states fear their constituents may perceive them as being unresponsive to an area of need so adoption by the majority results in increased pressure to institute a given policy. Walker noted, “[O]nce a program has gained the stamp of legitimacy, it has a momentum of its own” (p. 890).

Policy diffusion theory is focused not only on explicating the adoption rate of a given policy but also on identifying potential adoption patterns to assist with predicting whether and when a particular state will decide to enact a policy. The policy diffusion literature posited three models, which may all occur simultaneously, resulting in a state’s decision to adopt or not to adopt a particular policy. Newmark (2002, p. 158) categorized the models as follows:

- Organizational diffusion where people and groups learn about innovative policy alternatives from one another through participation in both formal and informal information networks resulting in an increased probability that a state will adopt a policy when its officials interact with those from a state already administering a policy [a concept also supported by Karch (2007)].
- Regional diffusion where a state typically copies the policy actions of states in the same region, particularly contiguous states. Regional diffusion encompasses both economic competition and social learning theory [also corroborated by Berry and Berry (2007, p. 225)].

- Internal determinants that correlate with policy adoption such as a state's political, economical, and social characteristics [see also Berry and Berry (2007, p. 225)].

Illustrative examples of a policy diffusing through organizational channels include studies by Ingle et al. (2007) on the regional adoption of postsecondary merit aid programs in the southeastern states and Berry and Berry (2007), which cited the effects of “normative pressure” where “state officials tend to be socialized into shared norms by common professional training and by interaction in professional associations” (pp. 225-226). Finally, Balla (2001) hypothesized that “national communication networks may play a role in policy diffusion” (p. 222). He specified national associations and the participation of key individuals on national committees charged with creating and implementing policy in a specific area. Opportunities to aggregate this information may be through a variety of mechanisms—meetings, journals, or informal interaction with other members of the national association and its subcommittees.

Although organizational diffusion can involve numerous venues of information exchange, many policy diffusion researchers have emphasized the pivotal role of a policy entrepreneur in advancing the implementation of a policy in a state. A policy entrepreneur can serve in many roles: a member of a nonprofit foundation or various interest groups, a member of a government committee, or a state representative to a national association affiliated with a specific policy arena. The policy entrepreneur's job frequently involves interaction with field experts from other states through various formal and informal networks (e.g., conferences, national association task forces, and state association boards). Through their exchanges with other individuals in the field, they

learn information about how other states are addressing policy issues, innovative programs, or national-level priorities. Doing so enables the policy entrepreneur to return to his or her home state armed with important data that affect a state's decision to adopt a policy. Officials may choose the policy solution offered by a policy entrepreneur because the officials perceive the policy entrepreneur as a credible expert in a field. In addition, officials may want to use this insider knowledge to demonstrate to constituents, interest groups, or other states that they are enacting innovative policies or to avoid the perception that the state is clinging to outmoded policies.

Ingle et al. (2007) found both economic competition and policy networks were instrumental in a region's adoption of postsecondary merit aid programs, citing "external policy entrepreneurs, agency staff," and professional organizations (e.g., the Southern Regional Education Board) as influences policy makers noted as "important information sources and agents of cross-state diffusion" (p. 624). Walker (1969) indicated "occupational contact networks," in which officials convene at national conferences and through formal and informal interactions, gain "awareness of latest developments in the field" (p. 895).

Furthermore, Mintrom and Vergari (1998) examined the role of policy entrepreneurs in the adoption of state-level school-choice policy. The researchers mailed a survey to the 48 contiguous states and asked the chief state school officer in each state to identify "the most important school choice policy entrepreneurs in their state and to record the year in which they first advocated school choice" (p. 133). The authors received responses from 26 states, which they analyzed to determine whether policy entrepreneurs' network use influenced initial state legislative consideration of school

choice and whether network use influenced the likelihood of legislative approval of school-choice laws. Their statistical analysis revealed “the presence of a policy entrepreneur increases the likelihood of state legislative consideration and approval of school choice” (p. 138).

In a study of state adoption of an HMO Model Act, Balla (2001) studied members of the National Association of Insurance Commissioners (NAIC). He postulated that the level of a state insurance commissioner’s participation in a NAIC committee would correlate with the likelihood that a state would adopt a model insurance act drafted by the NAIC. He hypothesized that several converging determinants would increase the likelihood that a state would adopt the HMO Model Act. He suspected a “professional diffusion” effect (p. 230) and suggested a state commissioner’s participation in a national association would positively influence a state to adopt the HMO Model Act, especially if that state’s commissioner was a committee member on a national association committee. Balla proposed that “national communication networks may play a role in policy diffusion” (p. 222) because associations may facilitate diffusion through providing states with information to “learn about current developments in their policy area . . . the approaches that other states have taken to address particular problems” and that associations “provide institutional foundations for policy development” (p. 223). Balla’s findings confirmed his hypothesis and indicated that a state commissioner’s participation and his or her degree of involvement at the national association level had a statistically significant, positive effect on a state’s decision to adopt the NAIC policy. In addition to confirming professional diffusion, Balla found “regionalism affected the diffusion of HMO regulations . . . suggest[ing] that neighboring states provide important cues in

numerous types of policy areas” (p. 238). In his discussion of areas for future research, Balla recommended examining “the mechanism through which institutions such as committee systems facilitate the diffusion of innovations” (p. 241). He postulated that policy entrepreneurs “may link external and internal policy networks” (p. 241), thus helping their home state to adopt a policy.

The literature advocating for strong-to-moderate effects of geographic proximity on policy diffusion is prolific. McLendon, Heller, and Young (2005), in their study of postsecondary policy innovations, found “the mean-years effect of when a state adopted a policy in relation to its contiguous states was strongest between three and five, suggesting that it may take some number of years before an innovation begins to influence its neighbors” (p. 390). Furthermore, Boehmke and Witmer (2004) focused on the effects of social learning theory and economic competition on policy adoption and expansion using the policy arena of Native American gaming facilities. The authors described social learning theory as “state[s] tend[ing] to draw on the experience of nearby states when considering whether they should adopt a policy” (p. 39), paralleling Walker’s (1969) concept of emulation and Newmark’s (2002) concept of lesson drawing. Boehmke and Witmer defined *economic competition* as “a response to inter-state pressures in the form of lost business, tax revenues, and jobs” (p. 39), circumstances Shipan and Volden (2008) referred to as “negative economic spillover” (p. 842) and Volden (2002) called “competitive federalism” in which states make policy decisions based on a cost/benefit analysis of implementing the policy to remain competitive with other states and avoid loss of “residents, businesses and part of its tax base” (p. 352).

In their study of the adoption of Indian gaming policies and the expansion of the number of contracts within a state, Boehmke and Witmer (2004) found economic competition affected both innovation and expansion. They hypothesized this result may be related to a state's desire to retain revenue, what Shipan and Volden (2008) called a "positive economic spillover" (p. 842). If state legislatures do not approve the establishment of gaming facilities in the state and the subsequent expansion in the number of facilities, they risk losing the revenue to neighboring states with more robust gaming operations. Cohen-Vogel and Ingle (2007) found a similar result when examining postsecondary merit aid programs. They discovered that states were inclined to adopt programs if geographically proximate states offered programs to prevent "brain drain" and to increase the number of residents with a college degree, leading to improved economic and workforce conditions in the state (p. 246).

In contrast to the effects of economic competition, Boehmke and Witmer (2004) found social learning affected innovation but not expansion. The authors found a statistically significant effect for states with no gaming that had at least one neighbor with Indian gaming. In addition, they found the positive effect became negative once the number of neighboring states reached three. This inconsistent influence that adopting neighboring states had on state adoption mirrored findings reported by Mooney (2001), who reviewed 24 studies conducted in the 1990s using event history analysis to study state policy diffusion and found only half had positive statistical significance for the regional effect, leading him to conclude "the regional effect is neither always positive nor always constant" (p. 104).

Studies finding evidence of the effects of internal determinants on diffusion span a diverse range of policy areas. Stream (1999) found both internal determinants (percent of people without health insurance in a state, state fiscal health, and bureaucratic capacity) and regional diffusion had a positive effect on state adoption of small-group health insurance. Soule and Earl (2001) studied a variety of factors, including state characteristics, and found internal determinants (e.g., per capita income, percentage of Democratic representatives, level of media attention in the state) played a significant role in the probability of a state adopting hate-crime legislation. Furthermore, Grossback, Nicholson-Crotty, and Peterson (2004) examined the adoption of state lotteries, academic bankruptcy laws, and sentencing guidelines to evaluate the informational variables states rely on to make policy decisions. Guiding research questions focused on why states adopt a specific policy and how closely a policy mirrors the ideological leanings of the state government. The authors reasoned that states must make a determination of whether to enact change or to retain the status quo. Prior to making a decision, legislators will conduct a “cost-benefit” analysis to decide whether the innovation is worthwhile. Factors such as the potential effect on re-election, cost of policy implementation, adoption patterns of ideologically similar states, and the position of the federal government on a policy issue, play a significant role in influencing policy makers’ decisions. The findings of Grossback et al. indicated that the “degree of ideological similarity” (p. 525) was a stronger predictor of whether a state would adopt a policy than geographic proximity. Finally, Baybeck, Berry, and Siegel (2011) reported comparable results when mapping state strategies in considering whether to implement a state lottery. They found states had both defensive (preventing loss of revenue) and offensive

motivations (enticing residents of neighboring states with no lottery to cross the border to play) consistent with tenets of the economic-competition aspect of policy innovation.

Limitations of Policy Diffusion Theory

Newmark (2002) asserted that “the strength of diffusion studies lie in their predictive ability to determine what factors, whether organizational, geographic, or internal, will lead to program or policy adoption” (p.161), yet he acknowledged that the theories of policy diffusion and policy transfer overemphasize innovation and adoption and largely ignore other elements of the policy process, such as the adaptation of policies from one context to another and policy failure. However, Walker (1969) cautioned that, although his research may assist policy makers with identifying adoption trends, the policy process from agenda formation to deciding on a policy solution is complex and involves “an enormous number of idiosyncratic influences” (p. 883), which may result in a state labeled as a slow innovator (or laggard) in one policy arena to be the first to adopt a policy in another area. Gray (1973) underscored Walker’s caveat, admonishing that a state acting as a policy pioneer in one area may not be a bellwether state in another area and noting that policy content plays a determining role in speed of policy adoption or whether a policy is adopted at all. Further, Boehmke and Witmer (2004) suggested that the various diffusion patterns “may have different effects for policy innovation and policy expansion and that these effects may vary across policy areas” (p. 39).

Volden, Ting, and Carpenter (2008) performed a complex statistical analysis in an effort to discern whether state governments truly do learn from one another, as postulated by policy diffusion theory, or whether states make “myopic” decisions based on their own experiences, with the resulting policy actions only appearing to mimic those of other

states. The analysis of Volden et al. indicated that “much of the scholarly work seen previously as evidence of policy diffusion could have arisen through independent actions of states that confront common problems at about the same time and only learn from their own experiences” (p. 329). Their findings prompted them to recommend that policy researchers engage in more multi-state studies that track “when and where learning-based policy diffusion occurs” through the use of methods that focus on “policy success, conditional patterns of policy maintenance and longevity, on policy abandonment, and on free-riding behavior” (p. 329). These suggestions for future research open a number of avenues for researchers to pursue expanding the focus of the policy-diffusion literature beyond the investigation of variables affecting innovation and initial policy adoption.

Specific to the regional diffusion effect, Mooney (2001) conjectured that changes in regional diffusion over the course of time may be a result of states learning new information, the needs of the state changing, or the information sources that policy makers decide to attend to, whether individuals (policy entrepreneurs) or information networks. Mooney advised that regional learning has the most significant effect on new, “untested” policies (p. 120). Karch (2007) acknowledged that, although geographic proximity may play a role in policy diffusion, the degree of its effects may be diminishing in importance as technological advances in communication facilitate information exchange on a global level, making geographic proximity less of a source for gaining policy-relevant data.

The Role of Policy Diffusion Applied to This Research

One aspect of this study was to complete a cross-comparative content analysis of written guidelines for related service provision from a sample of 12 states, selected from

the total number of states with written guidelines published in the last 10 years. Karch (2007) advocated for examining policy content to identify “what is being diffused” (p. 54) as a potential influence on the spread of a topic-specific policy. Karch noted that “policy content [is] a critical issue that has received relatively limited scholarly attention . . . [with] many significant questions unaddressed” (p. 55). In the process of fact-checking information about the various manuals, this researcher attempted to determine whether states examined other states’ manuals when selecting topical content for inclusion in their own manuals or when making a decision to implement some alternative form of guidance for related service provision.

McLendon and Cohen-Vogel (2008) acknowledged that, despite years of policy research attempting to identify the process of educational policy change at the state level, there are still too many questions to permit policy researchers to feel confident they have a grasp of how to set policy agenda, how to predict when a policy’s time has come, what factors positively or negatively influence the probability of policy adoption, and what contextual factors in each state or policy arena (e.g., education) influence state-level policy change. The authors noted, “[S]cholars have paid too little systematic attention to these questions, and likewise, to building, elaborating, or testing theories capable of explaining education policy change in the American states” (p. 30). Therefore, this present study investigated what factors influence a state to adopt or not to adopt a set of written regulations for related service provision in the public schools. Although the study was topic specific, the findings may help inform both researchers and policy makers about adoption trends that may prove useful when attempting to promote state adoption of a particular policy alternative. In addition to identifying variables that potentially

influence a state's decision regarding a specific policy, this study also examined adoption patterns among a sample of states using two principles of policy diffusion theory as an organizational framework for collecting quantitative information on each state to determine whether the established regional effects of diffusion and the involvement of a policy entrepreneur applied to the adoption of related service guidelines.

The researcher selected these two variables from the numerous characteristics discussed in the policy-diffusion literature because they appeared to have the highest degree of relevance to the topic. The state-level related service guidelines are voluntary and do not require gubernatorial or legislative approval. The issue of whether to provide guidelines is not tied to political partisanship, nor do the guidelines involve a possible economic gain or loss for states. Because most states convened a task force to draft the guidelines, the presence of a policy entrepreneur on the task force may have had a significant effect on selection of other task force members, the content of the manuals, and the degree to which the guidelines reflected the position of the AOTA on the role and scope of practice of OT practitioners in public schools. McLendon et al. (2005) supported this line of inquiry by recommending "future scholarship should pay closer attention to the role of [policy] entrepreneurs in disseminating ideas among and within states" (p. 390). In a later article summarizing existing policy diffusion research and providing recommendations for potential avenues for future research, Karch (2007) lamented that "relatively few diffusion studies have examined the impact of policy entrepreneurs and this has been a long-standing criticism of the field" (p. 67). He asserted that the study of the role of policy entrepreneurs in cross-state diffusion is an area requiring "greater attention" in policy-diffusion research to broaden understanding

of “which diffusion agents spark certain types of diffusion episodes and why” to “enable scholars to explain variation among policy adoptions in their number and geographic distribution” (p. 68).

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

This mixed-methods research study was focused on examining the contents of existing state-level written guidelines for related services, specifically OT in the public schools. Creswell (2009) defined *mixed methods research* as “an approach to inquiry that combines . . . both quantitative and qualitative forms. . . . It involves the use of both approaches in tandem so that the overall strength of a study is greater than either quantitative or qualitative research” (p. 4). The researcher selected a concurrent embedded strategy, which involves simultaneous collection of both quantitative and qualitative data. Typically, in this type of mixed-methods research, one method is dominant, with the second method playing a supporting role. Creswell explained the term *embedded strategy* stems from the concept that the secondary methodology is “nested within the predominant method” (p. 214). Creswell noted that the secondary method may probe another question of interest that supplements the data analysis of the primary method and provides additional explanation, support, or understanding, giving a “composite assessment” of the research questions (p. 214). This chapter includes discussion of the research strategy, the methods for sample selection, and the data collection and analysis procedures. It concludes with the limitations of this study.

Research Strategy

Eighteen states were the focus of this study: 12 with existing state guidelines for related service provision (specific to the delivery of OT services in the public schools)

published in the last 10 years and six categorized as nonadopters that either had outdated guidelines (defined as guidelines published more than 10 years earlier) or had no evidence of ever publishing guidelines for related service provision. This concurrent embedded study had multiple components: (a) completion of a cross-comparative content analysis of the manuals, using document review with an author-designed rubric as a framework for the analysis; (b) use of qualitative methods to pose directed questions to a target group of participants to obtain additional information about the process of developing the manuals and to triangulate the accuracy of the findings from the content analysis; (c) use of qualitative inquiry to explore factors affecting a state's decision to adopt or not to adopt written guidelines for related service provision; (d) use of the qualitative inquiry process to identify alternative methods states use to guide related service provision; and (e) examination of the applicability of portions of policy diffusion theory (geographic proximity and presence of a policy entrepreneur) to this specific policy area through both quantitative and qualitative data collection. The data analysis was cross-case, using an author-designed rubric with seven variables as a framework for the document analysis, a list of prospective questions to inform the researcher about the process and context of developing the guidelines, and concepts of policy diffusion theory as a theoretical lens to direct portions of the analysis.

This study examined the design of state level written guidelines for related service provision specific to OT practice. The following research questions guided the selection of the research design:

RQ1. According to the rubric constructed by the researcher, what is the quality of the content of the written guidelines?

RQ2. What are the common features of the contents of the written guidelines in the research sample?

RQ3. What are the factors affecting a specific state's decision to adopt or not to adopt written guidelines for related service provision?

RQ4. Are nonadopting states implementing alternative mechanisms to guide related service provision?

RQ5. Using the theory of policy diffusion as a guide, do the variables of geographic proximity and the activities of a policy entrepreneur influence a state's policy decisions concerning the implementation of written related service guidelines in a manner consistent with the policy adoption patterns for these variables substantiated in the existing research literature?

Research Design and Rationale

An embedded, mixed-methods design with concurrent collection and analysis of both quantitative and qualitative data appeared to be the best fit for this study. Yin (2009) remarked that embedded mixed-methods studies “can permit investigators to address more complicated research questions and to collect a richer and stronger array of evidence than can be accomplished by any single method alone” (p. 63). Yin argued that using a mixed-methods approach assists not only with replicating specific outcomes but also with determining the presence of “rival explanations” (p. 59). For the purposes of this study, a part of the analysis involved attempts to identify factors leading states to adopt or not to adopt written state-level guidelines for related service provision and to determine whether states are implementing alternate methods of guidance for the delivery of related services in the public schools. Alternate methods revealed in the course of this

study would be considered “rival explanations” to the concept that written manuals are the most effective approach to providing guidelines for related service provision.

The first method of data collection and analysis was a document review of the contents of written state guidelines for related service provision from a sample of 12 states. Criteria for inclusion in the analysis included the following:

- Manual had a publication date within the last 10 years (2002-2012)
- Manual contents directly addressed the provision of OT services in the public schools
- The state is part of the contiguous 48 states (see sampling section for comments on Alaska and Hawaii).

Criteria for exclusion included the following:

- Manual had a publication date of more than 10 years (2001 or earlier)
- Manual contents provided general guidelines for special education but did not delineate specific guidelines or regulations for OT services in public schools or reiterated verbiage directly from federal law with no supplemental information.

Mason (2009) suggested that document analysis not only integrates a literal reading of the contents but also aids in forming an impression of the knowledge and meaning the document attempts to construct and the process involved in the generation of the contents. Mason further suggested that documents should be “interpreted in the context of . . . how they are produced, used, what meanings they have, what they are seen to be or to represent culturally speaking” (p. 108). To organize the content analysis of the manuals, this study applied an author-designed seven-variable rubric to assess the

comprehensiveness of each manual. In the research literature, this form of data gathering is sometimes called a *count model*. Boehmke and Witmer (2004) indicated count models generate “indices of policy comprehensiveness by counting the number of criteria that a state’s policy meets” (p. 48).

Some evidence for the use of count models to assess policy comprehensiveness exists in the literature. For example, Hays (1996) evaluated the comprehensiveness of policies in three categories (child-abuse reporting laws, crime-victim compensation laws, and public campaign-funding laws). He defined *comprehensiveness* as “the breadth and coverage of the language of the law in its effort to remedy the social problem” (pp. 635-636). Hays developed a checklist of stipulations for each law and coded them as 1, if present, and 0, if absent. He analyzed the variable of policy comprehensiveness as part of his examination of the state-policy adoption process. In another illustrative study, Stream (1999) used a count model as one methodological process in his study of state adoption of small-group health insurance policies. As part of his larger data analysis, he used a numerical scale to measure the number of small-group health insurance policies a given state adopted by assigning one point for each adopted policy in a given category (e.g., rating practices and definition of a small group). Statistical calculations confirmed the scale “was both internally consistent and reliable” (Stream, 1999, p. 504).

This present study used the tenets of a count model in a rubric format. Rubrics may involve the use of letter grades, rankings, or point values. In policy, rubrics are one organizational technique for categorizing policies and fall under the classification of a policy design. Ingram and Schneider (1990) defined *policy design* as “giving form or providing a blueprint for a concrete response to a need or problem” (p. 71) or a means of

evaluating policy content to examine how it accounts for variables, including human behavior, competing values, and multilayered problems by outlining “avenues of action” (p. 72). Such avenues of action may include providing rules or procedures. Rubrics may act as a policy blueprint by outlining content or variables that policy makers should include in a specific regulatory policy or policy guidelines pertaining to a particular area (e.g., healthcare, industry, or education).

A review of the literature confirms that, although the use of policy rubrics or ratings is limited, some authors advocate using a variety of tools to evaluate policy comprehensiveness, including policy scoring systems. Chelimsky (1985) validated the benefits of policy evaluation after its implementation to evaluate the “degree to which the program is operational, how similar it is across sites, whether it conforms to the policies and expectations formulated [and] whether there are major problems of service delivery” (as cited in Carron, 2003). Other rationales for rating policies include (a) to generate conversation about an issue among the various individuals and organizations the issue affects directly or indirectly (Coleman & Fischetti, 2009); (b) to bring an issue to the attention of legislators or other rule-making organizations through the use of a policy brief or report based on the ratings (Riley, Roach, Adams, & Edie, 2005); (c) to evaluate the comprehensiveness and clarity of a policy (Carron, 2003); (d) to provide feedback to policy designers and implementers to assist them in gaining increased knowledge about what constitutes an effective policy and in revising or implementing educational, training, or awareness programs (Boyce, Mueller, Hogan-Watts, & Luke, 2009); and (e) to justify funding for the above-mentioned initiatives (education, training, awareness) or the

funding of revising existing policies and guidelines (Glasgow, Boles, Lichtenstein, & Strycker, 1996).

The researcher developed a rubric with seven variables to include in state-level guidelines for school-based OT practice. Variable selection was based on the position of the AOTA concerning the profession's scope of practice in public schools, a review of relevant federal legislation, a review of the literature related to evidence-based and best practices of OT, and a review of the policy literature on rating policy strength and effectiveness. The seven variables and their maximum point values are outlined below and detailed in Appendix A:

- **Reference to federal legislation**, including (a) connection between relevant federal laws and school-based practice, (b) explanation of how federal law has mandated and defined related services, (c) discussion of how OT can be involved in both general education and school-wide initiatives, and (d) discussion of the requirements governing the supervision of occupational therapy assistants (OTAs), if applicable. 8 possible points, a maximum of 2 for each of the 4 criteria.
- **Reference to state regulations**, including whether the state (a) provided for related service provision and (b) addressed state licensure. 4 possible points, a maximum of 2 for each of the 2 criteria.
- **OT scope of practice in public schools**, including (a) comprehensive discussion integrating current research on best practice (e.g., use of evidence-based interventions; cross-contextual service delivery with an emphasis on providing intervention to the student in the natural environment; appropriate

use of a “pull-out” model; description or examples of the role of OT at the district, building, classroom, and individual level; tenets of collaborative service provision); (b) description of OT evaluation and intervention in school-based practice; (c) the role of the OT as a member of an IEP team; reference to the AOTA’s position paper on OT services in early childhood and school-based settings (most recent edition 2011); and (d) differentiation of medically and educationally based OT services. 8 possible points, a maximum of 2 for each of the 4 criteria.

- **Statement of purpose for the guidelines** and objectives, including a reference to the target audiences. 2 possible points, 1 criterion worth a maximum of 2 points.
- **Inputs identified** as (a) discernible references who provided input into the development of the guidelines, including (b) OT representation from various organizations and practice areas (e.g., state association, state licensure board, state school therapist association, national association, faculty from state OT or OTA programs, school-based practitioners, and OTs with experience working in public schools). 4 possible points, a maximum of 2 for each of the 2 criteria.
- **Oversight and accountability**, indicating (a) who is responsible for ensuring the guidelines are disseminated to the appropriate individuals and who is responsible for determining whether districts and practitioners are implementing the guidelines with fidelity, (b) whether incentives or sanctions are tied to implementing the guidelines, (c) whether a statement describes how

the manual is disseminated and how often, (d) whether training is addressed (who does the training, who receives the training, and the frequency of the training), (e) whether the frequency of revision of the guidelines is noted, (f) whether overt initiatives are addressed concerning educating OTs and others on the role of OTs in school-based practice, (g) whether the state conducts periodic impact surveys to determine the direct or indirect effects the guidelines are having on school-based practice and on positive outcomes for students receiving related services. 14 possible points, a maximum of 2 for each of the 7 criteria.

- **Resources**, including whether the state sponsors training and, if so, allocates appropriate funding for training both OT and non-OT personnel concerning the role of OTs in public schools. 4 possible points, a maximum of 2 for each of the 2 criteria.

Each variable and its applicable subcriteria were rated on a point system of 0-2.

The maximum point value on the rubric was 42 points for the seven variables. Appendix A includes a detailed description of the requirements to obtain a particular numerical score for each variable. The researcher elected to use a numerical system to minimize the possibility of evoking an emotional response from a reader to the scores by issuing a letter grade or ranking. The researcher limited the scale to three options to keep the scoring simple and, in the event that this research is replicated in the future, to increase the probability of high inter-rater reliability.

For the purposes of this question, the scorable content and related remarks are limited to guidelines pertaining to occupational therapy in school-based practice. The

content analysis included generic content that applies to both physical and occupational therapy but excluded tenets exclusive to physical therapy. The purposes of implementing a rubric to evaluate the content of existing state guidelines were threefold: first, to complete a cross-state comparison of the content of the guidelines using seven variables as the basis of the content evaluation; second, to identify any apparent gaps in the guidelines that may provide direction for future research; third, to use the ratings as a mechanism for opening policy conversations with state-level agency representatives to solicit feedback and obtain additional information about their existing guidelines.

The document analysis provided information about the content but not the context or process of the development of the guidelines. Therefore, the quantitative document analysis was supplemented by a fact-checking process in which the researcher queried key respondents involved in the development of the manual in the sample of adopting states to verify the currency of the document, its intended purpose, the contributors, the dissemination procedures, and the accuracy of the findings. This qualitative portion of the data collection served as the secondary method of the “composite assessment” described by Creswell (2009, p. 214). Mason (2009) emphasized the importance of going beyond content analysis in the course of one’s research, stressing that

documents are constructed in particular contexts, by particular people, with particular purposes, and with consequences-intended and unintended. You may wish to investigate why they were prepared . . . by whom, for whom, under what conditions, according to what rules and conventions. You may wish to know what they have been used for . . . and so on. (p. 110)

Potential key respondents with the capacity to illuminate the purpose, context, methods of selecting task force members, and other factors in the development of the document were identified as but not limited to state department of education personnel, OTs who hold board positions in the state association, members of the state licensure

board, OTs who participate in national level work for the profession's association (AOTA), members of the task force who aided in the development of the state-level guidelines for a specific state, and members of a school therapist state association (if one exists in a given state).

In addition, to gain an understanding about a state's decision not to adopt written guidelines and to learn whether the state was using an alternative method of guidance for related service provision, questions were asked of individuals in states who either (a) have not revised or updated their guidelines in more than 10 years or (b) have no evidence of ever having written state-level guidelines for related service provision. Individuals who could share relevant information included state department of education personnel, OTs who hold board positions in the state association, OTs who participate in national level work for AOTA, and members of a school therapist state association (if one exists in a given state). Appendix B includes a list of possible questions and a copy of the consent form for both sample groups.

Finally, the study reported the results of a quantitative analysis of two principles of policy diffusion theory—geographic proximity and the presence of a policy entrepreneur—for both state samples to determine whether the assumptions of policy diffusion theory established in the existing research literature were applicable to this specific policy area. As noted earlier, the researcher selected these two variables from a wide range of factors associated with state-policy diffusion because they appeared the most germane to this policy area. The researcher determined geographic proximity by making notations for each state with written guidelines on a map of the United States. The notations included the date of original adoption (if known) and subsequent revision

dates (if available). For each state in the adopter sample group, the number of contiguous states with manuals published prior to the sample state's initial adoption were recorded and organized in a tabular format. Notations were made for states with manuals published prior to 2002 and those with no evidence of ever having published a manual. The purpose of documenting these dates was to determine whether the established positive relation of a state adopting a policy when a neighbor state has the same policy increases with a greater number of contiguous states having a similar policy.

To determine the presence of a policy entrepreneur (defined in this study as a field expert with ties to national networks) in the sample of adopting states, the researcher gathered accessible professional information on each task-force member who provided input into the development of the manuals, including the following:

- Current position;
- Whether the person was an occupational or physical therapist, whether he or she had any experience working in the school system, and if so, how recently and the duration (in years);
- For OTs, whether they had ever participated in a committee or task force or held an executive position at the AOTA.

For the sample of nonadopting states, the researcher asked the key respondents whether they could identify anyone fitting the description of a policy entrepreneur who had advocated for the state to adopt or revise state guidelines. If the respondents did name individuals, the researcher attempted to contact them directly to ask about their role in promoting the adoption of written state-level guidelines for related service provision. Questions did not address respondents' personal opinions, beliefs, or feelings toward the

policy but concentrated on gathering information about the state's decision-making process concerning adoption or nonadoption of state guidelines and alternative strategies states may be implementing to guide related service delivery in public schools.

The research literature supported the investigation of rival explanations. In the context of this study, potential rival explanations pertaining to states appearing not to have adopted written guidelines could have included (a) a state having a manual undergoing revision, which was not publicly available at the time of this study; (b) a state revising a manual at the time of this study but not having made it public knowledge; (c) a state implementing an alternative strategy other than written guidelines to direct the provision of related services in the public schools, or (d) a policy entrepreneur having been actively advocating for the adoption of a manual in a particular state but efforts not having gained traction at the time of the study. Stake (1995) indicated that, with data source triangulation, the researcher attempts to “gain the needed confirmation, to increase credence in the interpretation, to demonstrate the commonality of an assertion” (p. 112) by investigating whether rival explanations exist.

Sample Selection Strategy

To select states for the adoption sample group, the researcher divided the 48 contiguous states into three groupings, using a visual representation of the states: eastern states (24), central states (13), and western states (11). Alaska and Hawaii were excluded because their geographic locations precluded assessment for the effect of geographic proximity on state-policy diffusion. As a note of interest, Alaska adopted a manual in 2008, and Hawaii did not have any existing state-level guidelines for related service provision at the time of this study.

The initial goal was to select the most recently published manuals for each region to increase the probability of being able to contact individuals involved with the development of the manual, to find manuals with current information (e.g., manuals published before 2004 would not reflect amendments to the IDEIA, 2004), and to have equal representation from the three groupings (i.e., four states from each region). As the researcher mapped the adoption dates, it became apparent that there was an uneven geographic distribution of states with current guidelines, as shown in Table 3.1.

Table 3.1

Distribution of States With and Without Written Guidelines by Region (N = 48)

Region	Greater than 10 years	Within 10 years	No manual
Eastern	3	12	9
Central	1	8	4
Western	1	4	6

In addition to the uneven distribution across regions of viable manuals meeting the criteria for this study, in the eastern region, five manuals met the exclusionary criteria detailed in this section so were not selected for analysis. The states meeting the exclusionary criteria were Connecticut (publication date 1999), Georgia (publication date 1980), Florida (publication date 1982), Mississippi (generic guidelines reiterating federal law), and New York (guidelines pertained to New York City only, not the entire state). States representing the adoption group for this region included Vermont, New Jersey, Virginia, North Carolina, and South Carolina.

In the central region, two manuals met the exclusionary criteria so were not selected for analysis. The states meeting the exclusionary criteria were Minnesota (providing only testing accommodation guidelines for students with disabilities) and Iowa (publication date 1996). The states representing the adoption group for this region were Wisconsin, Missouri, Illinois, Oklahoma, Arkansas, and Louisiana.

Two manuals in the western region met the exclusionary criteria so were not selected for analysis: Idaho (generic guidelines) and Colorado (1997). In addition, Montana was excluded because it was involved in a preliminary pilot study requiring the researcher to sign an affidavit agreeing the findings would not be used in future research. California's guidelines were undergoing revision at the time of this study, per communication with an OT in California serving on the guideline-development task force who asked to remain anonymous. Because the guidelines will change, California was excluded from the sample pool. Thus, Arizona was the only one to represent the western region in the adoption group. For all regions, an effort was made to select from the remaining states that met the inclusionary criteria (a) those with the most recently published manuals and (b) those with a range of demographic diversity within each region. This range of diversity would assist in having a sample that included rural, urban, and mixed populations.

For the nonadopter sample, the pool consisted of five states with manuals published more than 10 years previously and 19 states (excluding Hawaii) with no evidence of ever having published related service guidelines. In the initial qualitative inquiry, six of these states were included and invited to participate, with the objective of gaining at least two participating states as agreed upon with the researcher's dissertation

committee. In addition to the document analysis, this study also involved engaging in what Burgess (1984) termed “conversations with a purpose” (as cited in Mason, 2009).

This study used purposive sampling to select the respondents based on their professional position, their direct or indirect involvement with the development of a state’s written guidelines on related service provision, and the assumption that individuals in certain professional positions could provide information regarding a state’s decision concerning adopting written guidelines or pertaining to alternative strategies a specific state has implemented to guide related service provision. Lapan (2004) defined *purposeful sampling* as “the deliberate selection of information-rich sources...where the best data sources are defined by the study questions” (p. 242). Mason (2009) elaborated on this definition, stating that “theoretical (or purposive) sampling is concerned with constructing a sample which is meaningful theoretically and empirically, because it builds in certain characteristics or criteria which help to develop and test your theory or argument” (p. 124).

The initial purposive group of respondents sometimes referred the researcher to other relevant individuals who had consequential data to share in regards to the research questions. The process of building on an initial set of respondents through a referral process is called *snowball sampling*. Hutchinson (2004) explained that snowball sampling (also known as *network selection*) “involves use of referral, ‘word of mouth,’ and other methods of identifying potential respondents through previously identified participants” (p. 292). The initial group of respondents was identified primarily through five different data sources: (a) state department of education websites identifying the special education director or coordinator for related services; (b) individuals listed in the

manual as contributors; (c) state OT association websites, where board members' names and contact information were posted; (d) the AOTA website, where names of individuals who sit on school-based practice task forces or committees or act as executive board or committee members are publicly posted; and (e) conversational exchanges with personal acquaintances familiar with the sample states.

Data Sources and Analysis: Documents and Respondents

As discussed, this study used a mixed-methods approach known as an *embedded strategy*, in which the primary form of data was document analysis (quantitative), supplemented by qualitative data gathered through e-mail or phone discussions with participants. This research study focused on the analytical content review of a sample of 12 state-level written guidelines for related service provision in public schools. If a state's guidelines referred to other documents, for example, a state OT practice act or supplemental handbooks for school-based practice, the researcher procured these documents for review and included them in the content scoring on the rubric and in the subsequent content analysis. Most of the documents were publicly available, either through a state department of education or a state OT association. In the case of New Jersey, the researcher had to purchase the manual for \$35.00. The researcher reviewed both the written guidelines and any supplementary texts in their entirety for each of the sample adopter states.

When formulating the questions for data triangulation to verify the accuracy, currency, and history of the documents, the researcher started with a base set of questions constructed from the rubric variables (see Appendix B). In some instances, the researcher modified the wording of a question or added or deleted questions from the

base set to tailor the questions to that state's specific context. The researcher used the same process for the base questions for nonadopter states.

The researcher selected participants using the clustering procedure in which “the researcher identifies clusters (groups or organizations), obtains names of individuals within those clusters” (Creswell, 2009, p. 148) and then samples within them. This procedure was combined with snowball sampling when participants referred the researcher to other individuals whom the participants thought could provide useful information pertaining to the research questions. The initial clusters included state department of education personnel, lists of task force or committee members who participated in the drafting or revision of a state's related service guidelines, and board members of the state OT association or school therapist association. In most cases, no contact information for the task-force participants or referred participants was available. For example, the Virginia Department of Education (DOE) participant provided the name of an OT he thought qualified as a policy entrepreneur, but he did not have any contact information for her. When respondents could provide at least a name, the researcher attempted to locate contact information for these individuals via relevant websites (e.g., a specific state's OT association website) or via a Google search. Table 3.2 shows the respondents by category in each sample state for both the adopter and nonadopter groups.

The overall response rate was 49%. The response rate for adopter states was 10 of 24 prospective participants (a 42% response rate from 12 states). The response rate for nonadopter states was 5 of 9 prospective participants (a 56% response rate from 6 states). The degree of participation for the respondents varied, ranging from engaging in an extensive phone interview or e-mail exchange, in which the respondent offered detailed

information pertaining to each question, to making some brief comments concerning the general topic of written related service guidelines for a specific state.

Table 3.2

Distribution of Participants From Each Sample State (N = 18)

State	Adopter or nonadopter	Number contacted	Number of respondents	DOE employees	Task-force members	State association
Arizona	Adopter	1	0	1	—	—
Wisconsin	Adopter	2	0	1	1	—
Missouri	Adopter	1	0	1	—	—
Illinois	Adopter	2	2	1	1	—
Oklahoma	Adopter	1	0	1	—	—
Arkansas	Adopter	1	0	1	—	—
Louisiana	Adopter	8	4	1	3	—
Vermont	Adopter	1	0	1	—	—
New Jersey	Adopter	3	1	—	3 (1 participant, 1 declined, 1 did not reply)	—
Virginia	Adopter	1	1	1	—	—
N. Carolina	Adopter	1	1	1	—	—
S. Carolina	Adopter	2	1	1	1(declined)	—
Utah	Nonadopter	1	1	1	—	—
North Dakota	Nonadopter	1	1	1	—	—
Iowa	Nonadopter	2	1	2 (1 former employee replied, 1 current employee did not)	—	—
Texas	Nonadopter	1	1	—	—	1
Ohio	Nonadopter	1	1	1	—	—
Connecticut	Nonadopter	2	1	1 (former employee)	—	1 (did not reply)
Total		32	16	17	9	2

Although the researcher hoped for a higher response rate, some studies have substantiated 50% as an acceptable response rate for deeming the findings credible. Clark and Boser (1995) reported the results of an employment survey of graduates of the teacher pre-service class of 1992 at the University of Tennessee-Knoxville ($N = 284$). All graduates received surveys by mail initially (3 attempts), resulting in a response rate of 64.8%, and those who did not respond by mail were contacted by phone, resulting in an additional 40 responses (14.1%). The researchers concluded that “there was no evidence that data collected after 50% of the sample had responded yielded any meaningful difference in the findings” (p. 6). Furthermore, in a literature review of response rates for mail surveys, Richardson (2005) asserted that “50% is regarded as an acceptable response rate in social research postal surveys” (p. 398). Finally, Babbie (1990) determined that a 50% response rate was considered “adequate for analysis and reporting” while a response rate of 60% was classified as “good” and 70% or higher was “very good” (as cited in Katz, 1993, p. 8).

Concerning the participant pool, first, all invited nonadopter states responded to some extent, ranging from an elaborate discourse in response to the questions to brief remarks on the questions. This group, although small, was geographically diverse, including Utah (western region); North Dakota, Iowa, and Texas (central region); and Ohio and Connecticut (eastern region). Guest, Bunce, and Johnson (2006) upheld the validity of achieving data saturation with a small sample size. The authors conducted a study of female sex workers in two African countries. Their analysis of 60 interviews revealed “we had created 92% of the total number of codes after twelve interviews . . . [after that point] new themes emerged infrequently” (p. 74).

In the adopter group, several states had key participants who expressed interest in the research topic and professed a desire to improve school-based practice among OT practitioners. These individuals invested additional time and effort in assisting the researcher beyond the initial contact and initiated follow-up communication, either to reply to follow-up questions or to supply additional information or resources they thought of later. For example, in Louisiana, the initial inquiry yielded two respondents: one therapist and one DOE employee. After a second round of e-mails requesting participation from identified task-force members, two more individuals (both therapists working in the same parish) responded to the inquiry, and one of the two individuals provided e-mail responses. This individual worked with another potential respondent and assisted with facilitating the participation of this individual, resulting in Louisiana having the highest number of respondents.

The researcher applied for exemption from the Institutional Review Board at the University of Georgia and received an official exemption from human subjects review. The researcher issued a written consent form via e-mail to each participant, outlining the purpose of the research study, requesting voluntary participation in the study, and explaining the right of the respondent to rescind participation at any time prior to submission of the final dissertation to the committee. Each participant had the option of denoting any remarks they wished to remain “off the record” and could elect to remain anonymous, one of the options indicated in the consent. All of the participants returned a signed consent via electronic signature or fax and returned the completed list of questions, indicating their agreement to participate in the study (see Appendix B).

Validity and Reliability

Yin (2009) recommended four tests “to establish the quality of any empirical social research” (p. 40). During data collection, the researcher attempted to establish construct validity by using multiple data sources and having participants review a draft of the report to ensure their comments were reflected accurately. Stake (1995) supported the latter method of determining validity, calling the process *member checking* in which “the actor is asked to review the material for accuracy and palatability” (p. 115). This study used both techniques (use of multiple data sources and member checking) in an effort to achieve construct validity, and the researcher integrated respondent feedback into the section on findings. During the data-analysis phase, the researcher attempted to substantiate explanations and the “Findings” section includes a discussion of alternative (rival) interpretations of the data to confirm internal validity. This study explored alternative explanations through discourse with respondents in both the adoption and nonadoption samples.

External validity was limited in this study. Although there is a pool of existing questions that another researcher could use to replicate this study, each state has a unique set of characteristics, and the context and content of the states’ manuals vary. Berry (2002) advocated for the use of a base list of questions, maintaining “open ended questions have the virtue of allowing the subjects to tell the interviewer what’s relevant and what’s important rather than being restricted by the researcher’s preconceived notions about what is important” (p. 681).

Furthermore, the generalizability of the findings is unknown. In mixed-methods research with a qualitative component, portions of the data are representative of “the

context and participants studied,” a concept called *representational generalization* (Freeman, de Marrais, Preissle, Roulston, & St. Pierre, 2007, p. 29). However limited the ability to apply these findings from one state to another, the findings may still serve to inform state policy makers and individuals or organizations involved in developing guidelines for related service provision what content is generally viewed as most critical and how best to ensure the information is useful and effective for the target audiences. The limitations regarding the generalization of the study are further discussed in the following section. Reliability is possible because an individual could replicate this study by implementing the rubric and expanding the study to other states.

Limitations of the Research

The use of a researcher-designed rubric injects a degree of personal bias into the document analysis. The first potential bias in the rubric was the researcher’s underlying belief that state-level guidelines for related service provision would prove useful to consumers, administrators, legislators, educational personnel, therapists, and others; would positively influence school-based practitioner’s daily practice; and would directly or indirectly result in better educational outcomes and experiences for students who receive OT services in the public schools if the written guidelines incorporate, at minimum, the variables included in this rubric. Chi and Welner (2008), in their discussion of rankings and letter-grade ratings of charter school laws, encouraged authors using scoring systems to conduct policy analysis to “clearly state limitations and explain underlying values and assumptions” (p. 293).

The second potential bias affecting the research decisions in this study, variables to include in the rubric and evaluation of the selected states’ written guidelines, was

related to the researcher's professional role as a pediatric OT, formerly practicing in a public-school system. In light of this occupational history, the researcher has a vested interest in OT providing high quality, ethical services to all potential clients in the educational system: the system itself, districts, schools, each classroom, families, and students who receive direct or indirect OT intervention. Chi and Welner (2008) validated this concern, remarking that "evaluation criteria are not value free. Rather, these criteria can arise from such sources as a client's request, the evaluator's own values, or a desire to make the evaluation useful" (p. 275). They counseled that published rankings and ratings are potentially detrimental because they can lead to readers changing their beliefs about a policy issue, organization, or law without fully understanding the scoring methods or the possible hidden agenda behind a particular scoring system. They recommend full disclosure of an individual or organization's fundamental beliefs and values and a statement regarding the ratings' limitations and assumptions.

This study may be limited in terms of the ability to generalize the findings beyond the study sample to other states. Each state has its own unique population demographics and characteristics. Additionally, there is significant diversity among the states in terms of the number of OTs practicing in public schools and the number of students receiving OT services. Therefore, states implement the delivery of related services in various ways, and this study may not have captured all of the methods of OT service delivery in use across the 48 contiguous states, thus limiting the usefulness of any comparisons made in the context of the study.

Furthermore, although related services, including physical therapy and OT, are mandated by several federal laws (primarily NCLB, IDEIA, and Section 504 of the

Rehabilitation Act of 1973), the federal government permits states to develop their own regulations and guidance on how these services will be provided to students in public schools. Currently, no nationally endorsed template or content standards for related service provision guidelines exist. Because no reference document was available to act as an exemplar, the assigned scores for each variable regarding the contents of the manual were subjective. In an ideal situation, including adequate time and funding, this study would have included the training of additional raters in the use of the scoring rubric to act as reliability checks, and the researcher could have calculated and reported an inter-rater reliability score.

Although this study achieved a response rate of approximately 50%, and studies have indicated this is an adequate percentage to consider the findings of a study credible, the range of what researchers consider an acceptable response rate varies with the data-collection method (telephone or face-to-face interview, mailed questionnaire, or e-mail survey). Berdie (1990) suggested a 65-75% response rate is optimal for telephone surveys and indicated this is the target range for minimizing the effects of nonresponse bias (p. 11). In a later study analyzing mail, telephone, and interview surveys, Katz (1993) advocated for a “minimal response rate of 75%” (p. 3). Given the variation of acceptable response rates in the literature, the researcher would have initiated more follow-up attempts using various means (e-mail, phone, and face-to-face interviews) in an effort to increase the overall response rate if time and lack of funding had not been restricting factors.

Freeman et al. (2007) addressed the validity of conversational exchanges with study participants, noting that there are no pure data

uncontaminated by human thought and action” since the comments of the informants already integrate the opinions, beliefs, culture and other potential biases and the researcher’s interpretation of the remarks are not “neutral, because, as emphasized earlier, they are always positioned culturally, historically, and theoretically. (p. 27)

With these comments in mind, anyone wishing to use the findings of this study would be subject to the existing biases of the participants and researcher and would subsequently superimpose their own biases onto the work, making true validity appear an unattainable objective of research incorporating a qualitative element.

CHAPTER 4

CONTENT ANALYSIS AND QUALITATIVE DATA: ADOPTER STATES

To clarify the role and scope of practice of related service providers in the public schools, approximately 30 states have developed state-level program guidelines for school-based practice for related service providers. Some of the manuals are specific to OT; others include a broader range of related service personnel, such as physical therapists. One primary purpose of this study was to examine the design of state-level written guidelines for related service provision specific to OT practice. This chapter addresses the findings related to the first two research questions guiding the study:

RQ1. According to the rubric constructed by the researcher, what is the quality of the content of the written guidelines?

RQ2. What are the common features of the contents of the written guidelines in the research sample?

To address these research questions, this study involved conducting a cross-state content analysis of the state-level written guidelines for related service provision for 12 states. The content analysis was limited to the parts of the guidelines generally or directly applicable to OT. The analysis excluded content specific to providing physical therapy or other related services. The purpose of the analysis was to identify the commonalities and the unique features of the states' guidelines for related service provision specific to OT. To aid in organizing the findings, the researcher developed a

rubric to rate each manual on seven variables instrumental to OT service provision in public schools. The seven variables and their point values are detailed in Appendix A.

Scoring Notes

The seven-variable rubric indicates distinct criteria for achieving a specific point value. To receive a score of 2 points, the written guidelines had to incorporate explicitly all the criteria for a given variable. If there was a minor omission or deviation from the rubric standard related to one of the criteria, the researcher used professional judgment to determine whether the content warranted a score of 2. Guidelines received a score of 1 point if the content partially met the specified criteria, and a description of factors justifying a score of one are delineated in the rubric included in Appendix A. If guidelines had content exceeding a score of 1 but not meeting the criteria for a score of 2 points, the researcher issued a score of 1.5 points. A score of 0 reflects an omission of one or more of the stated criteria or use of outdated information, using the manual's publication date as a reference point (e.g., a manual published prior to 2004 could not incorporate the tenets of the IDEIA 2004 reauthorization so was not penalized). If an item was not applicable to a particular state (e.g., if a state did not use OTAs in schools so did not include information regarding supervision of OTAs), the researcher noted the item as *N/A* and did not subtract points for the given criterion.

The researcher used the rubric scores for the guidelines from the 12 sample states to calculate the means, standard deviations, ranges, and medians for the seven variables. Table 4.1 shows the data for each variable.

Table 4.1

Descriptive Statistics of the Explanatory Variables 1-7 (N = 12)

Variable	<i>M</i>	<i>SD</i>	Min	<i>Mdn</i>	Max
V1	4.46	2.46	0.00	5.25	7.50
V2	3.00	1.04	1.00	3.00	4.00
V3	4.83	2.49	0.00	5.25	8.00
V4	3.67	2.06	2.00	2.00	6.00
V5	2.10	1.67	0.00	2.00	4.00
V6	0.50	0.90	0.00	0.00	2.00
V7	0.08	0.29	0.00	0.00	1.00

As shown in Table 4.1, three variables (V1, V3, and V4) exhibited a 6-8 point range in mean scores, resulting in comparatively large standard deviations for these variables. The wide point spread may be due to the influence of several factors, including (a) date of guideline publication, (b) whether the document was a general overview of special education policies and procedures or a specific explanation and discussion of the factors affecting related service provision in schools, (c) whether the authors included a physical or occupational therapist in the development of the guidelines, (d) whether the document incorporated references from the AOTA pertaining to OT scope of practice in public schools, and (e) whether the document differentiated medically and educationally based OT services. The 12 sample states' scores on the seven variables and each state's cumulative score are shown in Appendix C.

Discussion of Each Variable

Federal regulations (Variable 1). In the context of special education, federal legislation dictates the structure and implementation of special-education services, including OT and other related services, in the public-school system. Chapter 2 included an extensive overview of the various federal laws supporting the role of OT in educational contexts. Although these laws mandate the presence of OT in schools, they do not dictate the format of service delivery. As Jackson (2007) noted, “IDEIA 2004 is essentially silent regarding specific approaches or types of intervention that must be used in the school, home or community” (p. 19). For therapists to implement federal legislation with intent, it is critical practitioners comprehend the “purpose under the law” and determine how to apply the tenets of the law simultaneously with the philosophy of occupational science to mesh the two frameworks, resulting in providing effective intervention that facilitates optimal outcomes for students (Jackson, 2007).

In extensive research on teachers’ implementation of national, state, and local mathematics and science standards, Spillane (2006) discovered that “getting the attention of local educators through public policy can be difficult. Locals often pay no heed to state and federal policies” (p. 61). He explained that federal policies offer broad, often vague requirements, leaving policies open to interpretation by various state organizations and individuals. In turn, state policy makers must configure federal regulations into policies that account for local contextual factors. Educational policy goes one step further, with districts, then schools, and ultimately, individuals developing their own unique understanding and perspectives of both federal and state policies, incorporating them into their existing fund of knowledge and experience, and operationalizing their

perceptions of the policies in their day-to-day work, creating the possibility that the same policy can look very different from one setting to another. Spillane (2006) confirmed the influence of individuals' own frames of reference when attempting to integrate new information and emphasized the importance of "initiating policies that nurtured deeper-level understandings of the standards" (p. 138) as policies move "from the statehouse to the schoolhouse" (p. 169).

The effects of "top-down" policy implementation pertaining to related services mirrors the process of federal education policy. National lawmakers pass mandates to states, where they are shaped to fit that state's milieu. State-level policy makers then distribute policies to local agents, who are responsible for putting them into practice in each setting. With the layers of bureaucracy and the number of individuals involved in bringing a policy from a concept to a set of actions, OT practitioners need to have a fundamental understanding of the overarching laws mandating and supporting school-based practice and the importance of state guidelines including federal laws and their connection to OT school-based practice.

A survey of 846 school-based therapists completed by AOTA in 2011 revealed a number of school-based practitioners or the districts they served did not have a strong understanding of the relation between federal law and everyday practice. Illustrative comments included "My district has a very limited interpretation of current legislation. . . . We cannot apply cookie cutter intervention programs to groups of children. The legislation is about INDIVIDUALIZED education programming." Another respondent opined, "Most OTs' knowledge of education law and state/federal requirements is sub-par" (J. Rioux, personal communication, December 1, 2011). States can play a pivotal

role in educating both OT and non-OT personnel concerning federal laws and how they affect daily school life using written guidelines as one mechanism to disseminate information. Table 4.2 shows an overview of each of the 12 adopter states' degree of inclusion of each applicable federal law.

Table 4.2

State Inclusion of Federal Laws in Related Service Guidelines (N = 12)

State	IDEIA	NCLB	Section 504	Head Start	ADA	Other
AR (2010)	G, no year	N	No	No	Def	AT
AZ (2008)	LD, 2004	No	No	No	No	No
IL (2003)	LD, 1997	N	LD	LD	N	No
LA (2006)	LD, 2004	No	No	No	No	No
MO (2009)	LD, no year	LD	FD	No	DEF	Title XIX
NJ (2007)	FD, 2004	FD	FD	No	No	AT Act
NC (2009)	FD, 2004	LD	FD	No	FD	Title XIX
SC (2009)	LD, 2004	No	FD	No	No	No
VA (2010)	LD, 2004	No	FD	No	N	No
WI (2011)	FD, 2004	No	FD	No	N	No
OK (2005)	FD, 1997	No	FD	No	LD	No
VT (2010)	No	No	No	No	No	No

Note. Def = defined in text, no discussion; FD = full discussion; G = law listed in glossary, not in body of text; LD = limited discussion; N = law named, no discussion; No = no mention of law.

As shown in Table 4.2, most states referred to some degree to both IDEIA (11 of 12 states) and Section 504 of the Rehabilitation Act of 1973 (8 states). The federal government did not publish the regulations of the 2004 IDEIA reauthorization until 2006.

Therefore, states that published guidelines between 2004 and 2006 (e.g., Oklahoma) probably did not have access to the 2004 regulations if their guidelines were published prior to the public release of the new IDEIA regulations. Three of the 12 states (Arkansas, Missouri, and Vermont) did not indicate which version of IDEIA they used as a reference document.

As noted previously, the 2004 reauthorization of IDEIA included significant modifications to existing law, including provisions for at-risk students through the response to intervention (RTI) process and the provision of early intervening services (EIS). Given the significant district-wide role occupational therapists could serve in RTI and EIS programs, it is disheartening that only three of the 12 states mentioned OT as part of the RTI team.

Louisiana had a unique set of circumstances in relation to Section 504. According to both the revised *Occupational Therapy and Physical Therapy in Louisiana Schools Reference Handbook* (LA Department of Education, 2006) and the *Pupil Appraisal Handbook, Bulletin 1508* (LA DOE, 2009), a student must qualify for special education to receive an OT evaluation. Under the eligibility criteria, the documents stated that “both A and B must be met” (LA DOE, 2006, p. 16; 2009, p. 62). Criterion A required “the student is classified and eligible for special education services” (LA DOE, 2006, p. 16; 2009, p. 62). Criterion B noted the student must “demonstrate a motor impairment in one of the following categories: Developmental, Motor Function or Sensorimotor” and detailed the degree of delay per age group (3-5.6 years, 5.7-9.11 years, and 10-21 years) a student needs to exhibit according to a standardized assessment instrument to qualify for the developmental category (LA DOE, 2006, pp. 16-18; 2009, pp. 62-64). These

qualifications indicate a student in general education who does not qualify for special education could not access OT (or PT) services in Louisiana schools, in apparent conflict with such federal laws as IDEIA and Section 504.

Neither of Louisiana's official documents mentions Section 504, nor is there information on the state DOE's website regarding Section 504. The two OTs who participated in this study responded to the following general question: "Are OTs in LA typically involved in general education initiatives in the schools? If so, could you provide an example?" One respondent (who requested anonymity) explicitly stated that "students who receive 504 plans in LA are not covered by OT/PT services as per state guidelines, which require an IEP for students receiving these services in the public schools (sic) setting" (personal communication, April 10, 2012). This individual had been an OT for 22 years and had worked in a public-school setting in the same parish for the previous 10 years. She participated in revising the 2006 state guidelines and had served as a co-district representative for the state association. The second OT who responded to the question was a member of the original task force that developed the guidelines in the 1980s and continued to participate in major revisions (the latest in 2006). This individual had been an OT for 38 years and, at the time of this study, worked for a relatively urban district in Louisiana. She also responded that "we are not involved in the case until a student is being evaluated for special education services" (C. Watson, personal communication, May 9, 2012).

Although Section 504 is a civil rights law (as opposed to a special education law), it does mandate that any program receiving federal funds cannot discriminate against a person with disabilities. In the case of public schools, Section 504 requires that students

“with a physical or mental impairment that substantially limits one or more major life activities” have “equal access to public schools and receive an appropriate education” (Manasevit & Maginnis, 2005, p. 9). Section 504 specifies that, for a student to receive equal access and an appropriate education, that student may require an array of support services, including OT (see U.S. Office of Civil Rights, 2011).

To clarify the Louisiana DOE’s position on Section 504, the researcher followed up via e-mail with Janice Fruge, Assistant Director for the Division of Special Populations at the DOE. When asked whether a student could receive occupational or physical therapy services under Section 504 in Louisiana, Fruge replied, “You are correct that a student could require related services under 504. Unfortunately, due to a lack of funding, those services are not typically available for the 504 students. . . . We do have some districts that provide related services for 504 students, but these numbers are very small” (J. Fruge, personal communication, May 4, 2012). Based on the discussions with the various respondents from Louisiana, a variance in the understanding of the potential role of OT under Section 504 appears to exist. Options for achieving more clarity about Section 504 will be addressed in the last chapter because lack of information on Section 504 was not isolated to one state.

Furthermore, a few states incorporated federal legislation other than IDEIA and Section 504 into their guidelines. Several state manuals (AR DOE, 2005; IL State Board of Education, 2003; WI DPI, 2011) listed the Elementary and Secondary Education Act (NCLB) but did not discuss which portions of the law pertained to school-based OT, whereas four state manuals (MO Department of Elementary and Secondary Education, Division of Special Education, 2009; NJ Occupational Therapy Association, 2007; NC

Department of Public Instruction, Exceptional Children Division, (2009); VA DOE, 2010) indicated some connection between ESEA and school-based OT. Arkansas DOE (2005) and Missouri (2009) defined the Americans with Disabilities Act (ADA) with no explanation of its link to students; the Illinois State Board of Education (2003) referred to the ADA but provided only a discussion of how it relates to a person in the workplace. In contrast, Oklahoma DOE (2005) included some discussion on how the ADA pertains to students and the role of the therapist in ensuring schools follow the tenets of the law. Moreover, four of the 12 states cited other federal legislation included in the AOTA's position paper. These laws (detailed in Appendix D and noted above) pertained to assistive technology, children in Head Start programs, Title XIX of the Social Security Act, and food and nutrition. Arkansas (AR DOE, 2005) and New Jersey (NJ Occupational Therapy Association, 2007) referred to the Assistive Technology Act and Missouri (2009) and North Carolina (NC Department of Public Instruction, Exceptional Children Division [DPI], 2009) discussed Title XIX in terms of billing for Medicaid services in schools.

With federal legislation obligating public schools to provide related services, it is necessary for involved parties to understand the definition of *related services* (as indicated, for example, in IDEIA and Section 504) and be familiar with the supervisory requirements for certified assistant personnel (occupational therapy assistants, referred to as *OTAs*) because most states employ both OTs and OTAs in public schools. The 12 sample states addressed these topics in vastly varying degrees, from no discussion of either area (Arizona and Vermont) to an explicit discussion of both (North Carolina and Wisconsin). However, no national standards for OTA supervision exist, giving each state

the freedom to compose as vague or as precise a degree of guidance as it deems appropriate. In this sample, all states employed OTAs in educational settings, but Arkansas, Arizona, and Vermont did not indicate their supervision requirements.

State regulations (Variable 2). Concerning state-specific regulations, all the states had some form of state-level policy addressing related service provision in public schools, ranging from general administrative codes to profession-specific practice. All states required state licensure of both OTs and OTAs. States had varying continuing education requirements for both OTs and OTAs to maintain state licensure. There was a moderate degree of disparity among the states in terms of the amount of information or direction they provided on how to locate copies of the regulations or information about state licensure. New Jersey (NJ Occupational Therapy Association, 2007), North Carolina (NC DPI, 2009), Wisconsin (WI DPI, 2011), and Virginia (VA DOE, 2010) provided explanations regarding requirements and state regulations, in addition to comprehensive lists of websites; Missouri (2009) indicated both practice act and licensure requirements and provided web links for both. Louisiana (2006) and Illinois (2003) provided the websites for state licensure, but both also referred to an OT Practice Act, without providing any links or resources for individuals to locate a copy; Oklahoma (2005) provided a link to the state DOE, whose website had policies and procedures for special education yet referred to an OT Practice Act and the state licensure board without giving any website or alternate contact information. Arizona DOE (2008) cited the state licensure requirement but did not include any information, such as a website URL, where to obtain a licensure application, or how to obtain a temporary license. Conversely, the South Carolina manual (Hanner, Martin, Schaefer, & Thomas, 2009) cited both the

requirements and affiliated websites. Arkansas DOE (2005) and Vermont DOE (2010) did not include any information regarding state regulations, with the exception of noting all educational professionals (including related service providers) must hold applicable certifications and licenses.

In addition to the standard licensure requirements, several states stipulated OTs must hold state-specific educational licenses, although the purpose in each case was unclear. For example, Wisconsin (2011) required that OTs hold a DPI license at an annual cost of \$100.00, in addition to a traditional state OT license and the costs affiliated with it. Louisiana (2006) also required that, in addition to state OT licensure, OTs hold an “Ancillary Certificate” from their state’s DPI (initial cost \$50, annual renewal \$25), and New Jersey (N.J. Occupational Therapy Association, 2007) required OTs to hold a DOE “endorsement” to work with students in grades K-12 (\$95 annual fee), in addition to state licensure. None of the states’ guidelines discussed the benefits of having the education-affiliated licenses (e.g., by indicating that OTs participate in specialized training or receive compensation for holding this license). Furthermore, additional research did not reveal any clear professional benefit of these specialized licenses to either the therapist or the clients they serve (i.e., school systems, districts, schools, classrooms, educational personnel, families, and students).

OT scope of practice in schools (Variable 3). Variable 3, which addressed the role and scope of practice of school-based OT, had the highest mean (4.83), as well as the widest range, of the seven variables. The large standard deviation is noteworthy. The wide point spread may be due to the influence of several factors, including whether a physical or occupational therapist assisted in the development of the guidelines and

whether the state document incorporated references from the AOTA providing guidelines for OT scope of practice in public schools and whether the document gave some differentiation between medically and educationally based OT intervention.

Some states provided specific information regarding the role of OT in schools. Only New Jersey (2007) and North Carolina (2009) cited AOTA resources on school-based practice in their bibliography, with no discussion of the content in the text. Arizona DOE (2008) made some mention of AOTA's 1997 school-based practice guide, yet considering its publication date begs the question of why the state did not take advantage of AOTA's free online resources and review the 2004 position paper on school-based practice. Nine of the 12 states did not refer to AOTA's position paper or other resources specific to OT school-based practice. A primary issue identified by AOTA in a survey of school-based therapists was an inability to describe their role effectively to administrators, educational personnel, parents, students, and other health professionals, particularly when attempting to differentiate between medically based and educationally based services (J. Rioux, personal communication, December 1, 2011). According to this present research, only eight states provided some delineation between the two therapy types, with three of the eight providing a scant amount of information in this area. Oklahoma (2005) indicated a difference between the two types of intervention but omitted any explanation; however, Virginia (2010), Vermont (2010), New Jersey (2007), and Arkansas (2005) failed to address this issue altogether.

Furthermore, none of the state manuals referred to the 2004 or the 2011 AOTA position paper on school-based practice. Oklahoma (2005) referred to the 1989 guidelines even though the 2004 guidelines would have been the most current at the time

its manual was published. Illinois (2003) indicated in a reference list that AOTA had guidelines for OTs in schools but did not provide any bibliographic or electronic retrieval information, nor did a discussion of the guidelines appear in the document. Virginia (2010) and Arizona (2008) quoted the 2002 version of the AOTA practice framework while Virginia cited the 2004 framework (although the researcher could not find any evidence such a document exists). South Carolina (Hanner et al., 2009) cited the 2008 framework, but none mentioned the Association's school-based guidelines. AOTA has published a number of materials on school-based practice and offers free fact and tip sheets on its website (AOTA, 2011a). Notably, AOTA also has its school-based practice guides posted on its website (AOTA, 2011b). Thus, the information was easily accessible to the states, but they did not use these valuable resources.

Moreover, none of the documents advocated for or indicated plans to expand the role of OT in schools. For example, there was no mention of training all OTs concerning a handwriting screening that therapists would implement for all students in K through 3rd grade throughout the districts. One could argue that instituting professional development for related service providers would add costs to an already strained budget, given that most districts do not provide any continuing education funding for therapists. However, a viable rebuttal would be that districts would be making a wise investment by fully utilizing their existing human capital rather than spending valuable funds on referring students for special-education services for full evaluations from a variety of special-education personnel because of handwriting legibility issues. In many cases, several students or an entire classroom could benefit from instruction in general handwriting or techniques to improve handwriting legibility. If OTs were providing classroom-based

screenings, they would be able to customize strategies for individual students, teachers, and classrooms, thus giving the district a better return on investment.

Clearly stated purpose or objectives for the guidelines (Variable 4). All the state manuals contained explicit purposes for the guidelines. The purpose statements ranged from a single sentence to one or more paragraphs. The objectives of the guidelines varied from a general objective that all children in the state would receive a free and appropriate public education to a fully developed statement of purpose with the inclusion of target audiences and recommendations that individuals use the guidelines as a reference, a supplement to federal and state legislation, or a resource to help inform educational personnel and the public on the role of related service providers in public schools.

Inputs (Variable 5). For the inputs variable, a wide range of information was gathered concerning who assisted with the development of each state's guidelines and what their professional roles were at the time of publication. Arkansas (2005)—one of the three oldest published in the previous 10 years—, Missouri (2009), and Vermont (2010)—two of the most recently published—did not provide any information on who authored their manuals. Arizona's 2008 guidelines acknowledged that the original document had input from "many OTs, PTs, educators, parents and administrators across Arizona" (2008, p. 1), but there was no statement clarifying who authored the 2008 edition.

Several state DOEs convened task forces to assist a designated DOE employee with formulating written related service guidelines. Illinois had a DOE liaison who assembled a task force of eight OTs and eight physical therapists. Although the

guidelines listed the name of the district or co-op (IL State Board of Education, 2003) and each individual, there was no description of the function of some of the listed agencies. For example, the list included *NIA*, with no information about the organization or its relation to IL schools. However, a web search showed the Northwestern Illinois Association is a regional special education cooperative providing related services to 10 counties in the state (Northwestern Illinois Association, 2010). The Illinois task force did not include any identified members of the state OT association, state licensure board, or OT/OTA program faculty from state institutions of higher education, nor did the task force solicit input from parents of students with disabilities or community special-interest groups. Louisiana took a similar approach, convening seven OTs and five PTs from parish districts around the state to work with the state DOE liaison for related services. When asked about garnering input from other individuals and organizations, Janice Fruge (the DOE liaison) reported that the document was reviewed by a number of special-education directors and parent support groups during the commentary process. The DOE also received feedback from the Advocacy Center in New Orleans. As Fruge noted, “They were opposed to the eligibility criteria (for related services) being implemented as part of the document,” and the state Board of Elementary and Secondary Education approved the guidelines, although the Board’s approval was optional, not required by the state (J. Fruge, personal communication, April 16, 2012).

Moreover, North Carolina had a DOE employee who wrote most of the guidelines’ content with the assistance of a graduate fieldwork student, then “sent the (draft) out to the list of editors for several review cycles until [they] reached consensus” (L. Holahan, personal communication, May 9, 2012). The editor list included three

school-based practitioners, two DOE administrators, one pediatric practice manager from AOTA, and three higher education faculty. When asked whether other individuals or organizations outside the task force provided feedback, Holahan responded, “Our legislature doesn’t look at stuff like that. No input from outside stakeholders, such as parents. If I were to do it again, I would solicit parent, support group, and interest group input” (personal communication, May 9, 2012). Finally, the Virginia DOE (2010) incorporated input from 19 individuals: four school-based physical and occupational therapists; four state DOE agents; two Virginia Occupational Therapy Association board members; two district department chairs; one faculty member from a PT or OT program; an administrator from the state’s early intervention program; two licensure board members; and two representatives of special-interest groups, including a parent advocacy group.

Oklahoma formed a large task force of 16 members: one assistant special-education director from the state DOE, the Director of PT and OT for the state, one nontherapist whose title was omitted, four OTs, and 10 PTs. In addition, post-professional graduate students from the University of Oklahoma assisted with the literature searches and document retrieval for the manual. Unfortunately, ambiguity surrounded this list because there was no distinction among these individuals’ professional roles or the agencies they represented (e.g., licensure board, institutions of higher education). It is significant to note the lack of community participation, for example, parents of students who had received related services in schools or members of various special-interest groups. However, Wisconsin took an alternative approach, hiring one PT and one OT consultant to write the bulk of the manual, with input from 17

enumerated individuals or organizations, including school-based physical therapists, physical therapy assistants, OTs and OTAs (7), faculty from PT or OT programs (3), district special-education directors (2), community-based practitioners (2), two districts, and one parent.

Two states had manuals written on a voluntary basis by the state OT associations rather than the impetus for the guidelines originating from the DOE. New Jersey assembled a 28-member committee of 18 school-based occupational therapists; five New Jersey Occupational Therapy Association members, including at least two executive board members; one pediatric practice manager from AOTA; one special-education attorney; and three individuals whose professional designation was not specified. Members of South Carolina's state OT association school-based practice special-interest section (Hanner et al., 2009) wrote its guidelines with input from the AOTA pediatric practice manager and DOE review.

The researcher consulted with a statistician to determine whether the data for V3 and V5 lent themselves to statistical analysis because one could surmise that a group with diverse representation and significant input from therapists in the development of the written guidelines would have a high score on V3 (OT scope of practice). Because the variables have subcomponents and states with a score of zero on either or both variables would have to be excluded, statistical calculations were not appropriate (J. Matthews-Morgan, personal communication, June 7, 2012). Although informal, a cursory review comparing the states' scores on V5 (inputs) to V3 (OT scope of practice) indicated input from a diverse group did not necessarily result in a richer description of OT school-based practice.

Accountability and resources (Variables 6 and 7). Both of these variables had globally low scores. The low scores indicated that states invested little-to-no resources in oversight to ensure standardized implementation of the guidelines, nor did the states allocate resources to provide training, education, or professional development for therapists, administrators, educational personnel, families, students, or other individuals and agencies with an interest in understanding the role of related service providers in schools. None of the sampled states delineated any explicit sanctions or incentives to implement the guidelines, and rarely was a person or organizational body identified as responsible for ensuring dissemination of the information and to providing oversight. Several of the guidelines contained vague suggestions for providing in-service training to educational personnel and parents to further their understanding of the role of OT in schools, but no state required such initiatives, nor did they specify any resource allocation (time, money, or district support) to support the execution of the suggestions.

The preponderance of the written guidelines (7 of the 12 manuals from adopter states) did not include any information about the dissemination of the guidelines, a standard timeframe for periodic revision, training for therapists and other personnel, or a state-conducted impact study on the efficacy of the guidelines. AOTA has a link to a spreadsheet with links to each state's guidelines (although some of the links were found to be outdated or incorrect during the course of this study). Most of the state-level guidelines were available on the states' DOE websites, with the exception of South Carolina (guidelines written by the state OT association and posted on the SCOTA website; Hanner et al., 2009), North Carolina (guidelines on a private website because they were never passed by the DPI), and New Jersey, where the NJOTA had a paperback

document for sale through the Association’s website. The South Carolina DOE e-mailed copies of the SCOTA guidelines to all of the special-education directors, and the Virginia DOE provided copies to all special-education directors and university staff. Some state DOEs (e.g., Illinois and Louisiana) conducted initial “roll-outs” involving training concerning the guidelines but had not offered updated training since the introductory training when the guidelines were first published. The Wisconsin OTA offered an optional annual online course for school-based therapists that included a review of the 2011 guidelines.

Furthermore, most states had no concrete plans to revise the manual, although both the DOE participants from Louisiana and North Carolina stated they would update the guidelines the following year. The only state that reported any type of efficacy information was Louisiana. The DOE employee from Louisiana indicated that the DOE had not completed any formal impact studies but perceived the guidelines to be effective according to anecdotal information.

Summary

According to the seven-variable rubric, the singular unifying feature of the 12 state-level written related service guidelines published in the previous 10 years was each manual expressed a purpose of providing some degree of direction for implementing OT in schools. Most state DOEs initiated development of the guidelines, but three state associations—those of Illinois, New Jersey, and South Carolina—either published the guidelines themselves or approached the DOE to request a “collaborative partnership” in which the association volunteers completed the bulk of the work in response to practitioner pleas for clarity concerning the role and scope of practice of OT in schools

and a desire for consistent practice across the state. Most of the documents indicated they were based on federal and state legislation, with other topical content based on federal and state mandates, although some states appeared to minimize an explanation of the role of OT in Section 504 and some omitted it completely from their discussion.

Furthermore, there is a clear need for states to update their guidelines to reflect changes to IDEIA in 2004, particularly RTI/EIS, and to delineate the ways OTs can participate in this process. Even less was said about the linkages between OT and NCLB, an issue that the pending reauthorization may bring to the fore and a connection all involved factions need to consider as the number of students in general education with medical diagnoses (e.g., attention deficit disorder, sensory processing disorder, autistic spectrum disorder) continues to rise. One evidentiary example was a report from the National Education Association (2012), advising that three of four students with disabilities spend part or all of the school day in a general education classroom.

Another discrepancy exists between the AOTA's perception of the role and scope of practice of OTs in schools and that of the field of education in general. Few state manuals addressed the role of OT in relation to Title XIX of the Social Security Act (1965), the ADA (most recently reauthorized in 2008), and the Assistive Technology Act of 2004. No states related OT to federal legislation concerning the Improving Head Start for School Readiness Act of 2007 (for children from birth to 5 years of age) or the U.S. Department of Agriculture Food and Nutrition Service Act of 2001. A review of the 12 sample state manuals revealed that a minority used any AOTA documents as a resource and state DOEs were not availing themselves of the free online and paper-based AOTA resources on school-based practice.

Another area of concern is the lack of standardization regarding the supervision of OTAs. Each state had different regulations and guidelines, some with specific requirements for direct and indirect supervisory time for OTAs in their state statutes, others with ambiguous categories of supervision based loosely on the number of years of experience an OTA has working in schools. These omissions leave much to the interpretation of educational administrators supervising OTs and OTAs, who are responsible for requesting additional supervision as needed. Several states reported the lack of clear supervisory requirements had led to case overload, with a supervising OT sometimes carrying a caseload of 20-40 students and supervising as many as five OTAs, each with his or her own caseload of 20 students or more. Many states did not include their OTA supervision requirements in their manuals, nor did they include links to appropriate resources, leaving it to OT practitioners to search available resources to learn about state regulations and to justify time spent on supervision as opposed to direct student intervention to administrators, who may be unfamiliar with state supervision regulations.

Notably, most states did not seek input from individuals or organizations that had direct or indirect interaction with OT school-based services. Parents of students who had received related services in schools, special-interest groups, and educators were noticeably absent, and the inclusion of higher education faculty from OT and OTA programs and input from AOTA was the exception, not the standard. No states featured AOTA's position paper on school-based practice prominently in their texts, and only a few incorporated any of AOTA's reference documents into their guidelines.

Finally, the lack of oversight and accountability was not only glaring, but consternating. Conversations with various individuals who participated in the drafting of state related service guidelines made it evident that the guides were voluntary and, because they were viewed as recommendations rather than mandates, states invested little-to-no time or effort to ensure that both OT and non-OT personnel were versed in the content. Most state-level administrators placed the responsibility on the local education agency (LEA) to disseminate information and ensure personnel were implementing policies with fidelity. The participant from South Carolina reflected the attitudes of other participants by commenting, “There is no direction for OTs and PTs working in the school system. It depends on district administration as to whether they are doing best practice. . . . The focus is on mandates, not extras” (S. Springer, personal communication, May 1, 2012). With the absence of formal needs assessments to determine therapists’ perceived needs in instituting best practices, the paucity of any accountability measures to determine the effectiveness of the guidelines, and inconsistent training and revision procedures, it is difficult to determine not only the level of effectiveness of the existing related service guidelines but whether written guidelines are the most effective means of providing direction for implementing related services in public schools.

CHAPTER 5

FEATURES OF NONADOPTER STATES

To clarify the role and scope of practice of related service providers in the public schools, approximately 30 states have developed state-level guidelines (often in the form of written manuals or handbooks) for school-based practice for related service providers. Some of the manuals are specific to OT; others include a broader range of related service personnel, such as physical therapists. The purposes of this study were to examine the design of state-level guidelines for related service provision specific to OT practice in public schools and to learn about factors affecting states' decisions concerning a mechanism for providing information and guidance for related services in public schools. This chapter addresses Research Questions 3 and 4, with an emphasis on the policy actions of nonadopter states relevant to OT school-based practice.

RQ3. What are the factors affecting a specific state's decision to adopt or not to adopt written guidelines for related service provision?

RQ4. Are nonadopting states implementing alternative mechanisms to guide school-based practice?

Chapter 4 included discussion of the adopter states, states that use the policy tool of written guidelines to provide a type of blueprint for educational personnel and those directly or indirectly receiving related services to facilitate understanding of the role and scope of practice of OT practitioners in public schools. However, this chapter addresses the actions of nonadopter states, those states that have chosen not to revise or update

outdated guidelines or that have elected alternative methods to guide provision of related services in public schools. Although respondents commented on their knowledge of the existence of a policy entrepreneur in their state in response to a direct inquiry from the researcher, the findings pertaining to this variable (and those regarding geographic proximity) are discussed in Chapter 6, which includes applicability of principles of policy diffusion theory specific to this policy arena, including a comparison of the findings of this study to the existing policy-diffusion research literature.

To further the base of knowledge regarding the contextual features of nonadopter states, the researcher engaged in dialogues with invited voluntary participants from six nonadopter states, using a predetermined set of questions to guide the conversations. Through an electronic search and participation in an AOTA-sponsored work group for state DOE representatives and OT practitioners, the researcher identified individuals in professional positions who were responsible for supervision of related services at the state level or who provided technical assistance about related services at the state level, such as current or former DOE personnel, OTs who served on state association executive boards, or independent consultants. The dissertation committee agreed the study would include at least two nonadopter states. The researcher invited representatives from six nonadopter states to participate in the study, and at least one individual from each state provided responses to a list of questions sent in e-mails. Some responded via e-mail while others participated in a discussion by telephone. Questions focused on the history of state regulations for related service provision in that state, the current status of state-level guidance for related services, factors influencing the state's decision not to adopt formal written guidelines for related services, alternative methods the state uses to direct

the implementation of related services in its public schools, and questions related to identifying an influential OT in the state who meets the criteria of a policy entrepreneur and who has taken an active role in advocating for some mechanism that promotes consistent school-based practice statewide and provides non-OTs with explanatory information concerning the role of OT in public schools.

The researcher made modifications to the questions prior to e-mailing them to participants to customize the questions for each state's context. Respondents who agreed to participate selected from options to provide answers to questions via e-mail or through a scheduled phone interview. The researcher presented these options in an effort to recruit a maximum number of participants by making their participation in the study as convenient for them as possible. The sample of nonadopter states included Connecticut, North Dakota, Utah, Iowa, Texas, and Ohio. This chapter includes discussion of each state's mechanisms for regulating related services at the time of this study and factors influencing the state's choice of a policy tool and concludes with a summary of commonalities among the mechanisms used by the states in the nonadopter group.

One state in the nonadopter group with a history of written related service guidelines is Connecticut, with one edition published in 1999. Based on the study criteria, it was classified as a nonadopter state because there was no publicly available evidence that the state had undertaken efforts to update the guidelines in the previous 13 years. The recruited contributor to this study who provided information on the state of Connecticut was Sarah Harvey, one of the members of the AOTA/DOE task force, along with the researcher. Although the task force had not had any face-to-face meetings, most

of the participants recognized each other by name, and the committee chair shared information about this study with the group when it convened in December 2011.

Harvey has a dual professional background as both an occupational therapist and as an attorney. Harvey practiced OT for approximately 7 years, spending most of her time working in schools. She became intrigued with special-education law and the concept of OT's nontraditional yet mandated role in public schools. She decided to attend law school to learn more about how national and state laws and policies affect school-based OT and concentrated her studies on educational law, special-education law, and child law. She holds law licenses in both CT and MA. While she was considering what career path she wanted to pursue after completing law school, a position became open at the Massachusetts DOE. Harvey worked there for one year. Her primary job responsibility during that time was to direct a revision project for the state's special-education guidelines, including regulations for related services. The Massachusetts DOE tabled the project in 2008 because the DOE shifted its focus to meeting newly issued federal regulations, so Harvey's primary job responsibilities shifted to compliance work and addressing issues concerning student postsecondary transition.

Harvey relocated from Massachusetts to her home state of Connecticut to be near her family and felt fortunate to secure a position with the Connecticut DOE. She worked there for 3 years, interpreting federal legislation and regulations, assisting with the development of state educational policy, and providing technical assistance to districts regarding the role of occupational and physical therapy in the state's public schools, with the objective of promoting best practices statewide. In January of 2012, Harvey left the DOE to open her own consulting company, Educational Compliance Solutions, LLC.

She believed there was a need to provide districts, educational personnel, and state administrators with assistance in implementing federal and state mandates with fidelity to the intent of the laws. Harvey noted, “The timing worked out at the end of last year. The governor made 2012 the year of educational reform in Connecticut. So, there is a lot going on at the state level” (S. Harvey, personal communication, April 16, 2012). She also remarked that there were a significant number of requirements for districts, so she offers a spectrum of consulting services, ranging from systems evaluation to professional development, on topics such as charter schools and the role of OT in public schools.

Harvey clarified that, although the 1999 edition of the state related service guidelines is the version posted on the DOE website, the “DOE and Bureau of Special Education do a lot of great work in terms of publishing a number of publications regarding provision of related services and special education, including companion guides for PT and OT” (S. Harvey, personal communication, April 16, 2012). Harvey confirmed that most school-based therapists continued to reference the 1999 guidelines: “I can tell you from personal experience, it was one of the first things I was handed at Easter Seals” (S. Harvey, personal communication, April 16, 2012). The DOE has been aware of the need to revise and update the guidelines for several years. When Harvey began working at the DOE in 2009, a number of publications were due for revision, and based on the questions posed to the DOE by various individuals and agencies, the DOE determined the priorities were to revamp guidelines for physical therapy, OT, and assistive technology (AT). The DOE established that the AT guidelines needed to be addressed first because of glaring discrepancies between the existing guide and current technology. For instance, the guidelines still referred to the use of floppy disks.

Although a DOE priority, the guideline revisions were superseded by participating in mandated state compliance-monitoring activities and learning to “operationalize new requirements” from the Office of Special Education Programs (S. Harvey, personal communication, April 16, 2012), leading to the DOE postponing the revision of voluntary guidelines, including the ones earmarked as priorities, such as OT.

In 2010, the state physical therapy and OT associations approached the DOE to propose a collaborative partnership among the three agencies to revise the 1999 related service guidelines. The DOE assigned Harvey as its liaison. Through this partnership, school-based practitioners participated in focus groups to communicate their perceptions concerning topics to include in the new guidelines, the format, and resources to include to facilitate therapists’ implementing best practices in educational settings. An illustrative example is therapists’ request to include guidance on the role of PT and OT in the RTI process (in Connecticut, RTI is known as *scientific research-based interventions* or SRBI). Historically, both physical and occupational therapists working in schools had primarily served students with disabilities whom the IEP team determined required related services to receive a free, appropriate public education and to meet their special-education IEP goals. Conversely, SRBI is a program serving at-risk students in general education. Therefore, most educational personnel, including the therapists themselves, could have been unfamiliar with the contributing role OT, in particular, could play in assisting the SRBI team with developing and implementing an appropriate intervention plan for general-education students referred for SRBI.

After gathering and reviewing focus-group data, the three agencies reconvened in 2011 to determine the next steps. According to Harvey, at the time of our discussion, the

state PT and OT associations were in the process of soliciting volunteers to form an advisory group to draft the new guidelines, with the DOE providing input as needed. The co-chairs for the project were the presidents of the Connecticut OT and PT Associations. Harvey obtained permission to provide the researcher with the contact information for the president of the OT Association, and both Harvey and the researcher initiated e-mail contact with this individual, trying to obtain her consent to participate in this study. Unfortunately, the individual did not respond to repeated e-mails. One potential explanation for her lack of response is that, although state association board members are elected by the association's membership, the positions are voluntary and not compensated, so most of the individuals work full or part-time. Thus, these individuals often juggle professional and personal commitments and generally have little time to engage in activities that place additional demands on their time. Harvey stated, at the time she left the DOE, the goal was to roll out the new guidelines some time in 2013.

Although Connecticut appeared to be a nonadopter state because of its apparent inactivity in updating its formal written guidance on related service provision for educational personnel and school-based practitioners, the discourse with Harvey confirmed one of the rival explanations proposed in Chapter 3: that Connecticut was actually in the process of revising written guidelines but that fact was not common public knowledge at the time of this study. Based on its history, Harvey believed the DOE would implement proactive measures to ensure the new guidelines are made available to appropriate individuals and organizations to increase various stakeholders' understanding of the role and scope of practice of OT in both general and special education.

In contrast to Connecticut, North Dakota had never had written guidelines for related service provision. Through the North Dakota DOE website, the researcher located the state DOE Coordinator (Dr. Lynn Dodge), who provided general oversight to districts in several areas, including related services, assistive technology, and universal design for learning (UDL). Dodge consented to participate in this study by responding to a list of questions via e-mail. Through her responses, she verified that, to the best of her knowledge (which included fact checking available resources to verify her answer), the state had never had written guidelines specifically for related services. Dodge indicated that North Dakota is “a locally controlled state so the local districts or special education units may have unit guidelines based on state guidelines” (L. Dodge, personal communication, April 19, 2012).

Dodge commented that she was unsure but thought “a couple of units” may have written some guidelines for OT (personal communication, April 19, 2012). It is noteworthy that, despite the state’s reported position that implementing and overseeing related service provision fall to districts, Dodge reported there are state-sanctioned guidelines for speech-language pathology. Speech-language pathology has a unique position under the tenets of IDEIA. It is classified as an instructional service; therefore, speech-language therapists can provide intervention to students as a stand-alone service, but IDEIA also has categorized speech-language therapy as a related service, like OT, with speech being a support service to students. Inquiries to various special education experts failed to reveal the rationales for why speech-language therapy achieved this unique role and why OT has not obtained similar status to date, given that the two

professions both require an entry-level master's degree, internship experience as part of preservice training, national board certification, and state licensure.

Dodge did not know why the state had not pursued establishing guidelines for school-based OT practice. However, she suspected that related services had “not risen to a crisis needing attention at the statewide level” (L. Dodge, personal communication, April 19, 2012). She gave an example of state legislators’ reluctance to take action on issues until a perceived crisis exists by mentioning a recent legislative meeting in which statewide needs concerning working with students with autism “were laid out for legislators” by a task force (L. Dodge, personal communication, April 19, 2012). The task force did not include projected costs to fund the proposed initiatives, so despite a state surplus of educational funds, the legislators would probably not take action until they had an idea of the fiscal implications of the proposed policies. Dodge’s remarks reflected the concept in the policy literature of “capture points.” Helms (1981) described “capture points” (p. 5) as periods when public attention to an issue is secured, and policy makers, interest groups, and advocacy coalitions seize the moment to “translate public concern into specific commitments of goals and resources” (p. 5). In the case of North Dakota, related services may not receive state-level attention until a policy window opens, providing the opportunity for related services to earn a spot on the state policy agenda. For example, when the reauthorizations of IDEIA and ESEA are finalized, there may be federally mandated changes to these existing laws that require states to take policy action to modify the implementation of related service provision in public schools.

In summary, at the time of this study, related services in North Dakota appeared not to require legislative or state DOE intervention; therefore, they were perceived to be

the responsibility of districts by default and according to a strong statewide belief in local control of education. Dodge was not able to substantiate whether the state had examined the policies of other states and whether, as a result, those states' policy behaviors had influenced North Dakota to decide not to adopt written related service guidelines or whether nonadoption was simply because of (a) an actual lack of issues with related services in the state or (b) existing issues concerning related service provision had not been brought to the DOE's attention. Because Dodge was unaware of the existence of a policy entrepreneur in the state, this factor and its influence on policy diffusion could not be evaluated at the time of this study.

Discussion with a DOE employee from Utah revealed that it shares North Dakota's philosophy on local control of education. Loving, a speech-language pathologist who is the DOE Coordinator for occupational and physical therapy, as well as the transition specialist for Utah, explained that there are "education specialists in the special education section [of the DOE]" who "provide technical assistance to school staffs and parents, as well as professional development on student eligibility for related services, determining appropriate services, writing annual IEP goals to address individual student's needs, etc." (S. Loving, personal communication, April 24, 2012). Loving started as the Transition Specialist with the DOE in 2001, and to the best of her knowledge, there had never been state-level guidelines for related service provision. She cited two primary factors influencing Utah's decision not to develop related service guidelines: "lack of available resources, especially state office staff time" and "anecdotal data from LEAs indicate that guidelines are not often utilized" because they are recommendations, not mandates (S. Loving, personal communication, April 24, 2012).

Another contradistinction between North Dakota and Utah involved comments from Loving suggesting the existence of school-based practice issues related to “the difference between the DOPL [Division of Occupational and Professional Licensing] requirements and LEA needs” (S. Loving, personal communication, April 24, 2012); however, Dodge was unaware of any issues pertaining to related services in North Dakota. The DOPL is one of seven agencies within the Utah Commerce Department. It regulates 60 occupational categories that require licensure in the state (including OT) and is responsible for investigating any complaints against these professions. Loving briefly explained, “[C]urrent practice is frequently at odds with DOPL requirements and state rules for OTs and PTs” (S. Loving, personal communication, April 24, 2012). Loving did not respond to an e-mail request to elaborate on the discrepancies between the two sets of regulations, and Internet-based research did not reveal potential contradictions between the two.

Furthermore, Loving reported that the DOE was working with the USOE (Utah State Office of Education) to create an educational license for school-based physical and occupational therapists so individuals holding this license would have “the protection to provide educational services and address supervision of those services” (S. Loving, personal communication, April 24, 2012). Benefits this license would provide to school-based practitioners are unclear. However, the limitations of this study included the inability of the researcher to obtain further information from this participant or to discover additional expository data through Internet research.

According to the limited information available, Utah appeared to be grappling with issues about the delivery of related services in schools and with the perceived role

and scope of practice of school-based OTs. At the time of this study, the state was considering a state-level regulatory action to resolve this issue, although it was unclear how having an additional state license through the USOE would benefit OTs and clarify their role in schools unless the state decided to make OT a stand-alone service, analogous to speech-language pathology. Speech-language pathology is both an instructional and a related service under IDEIA, permitting students to receive speech-language therapy services based on need and not on educational placement. However, to achieve similar status for OTs, Utah would have to pass state legislation qualifying OT as a special-education service instead of a related service.

IDEIA gave states the authority to categorize services as related services or special-education services (S. Harvey, personal communication, May 31, 2012). Thus, some states may elect to categorize a service classified as a related service in IDEIA as a special-education service because it circumvents “the financial problem of a school district being obliged to provide a service that IDEA funds do not subsidize because the service is not assisting a child with disabilities to benefit from special education” (S. Harvey, personal communication, May 31, 2012). For example, if Utah passed a law designating OT as a special-education service in the state, OT practitioners in schools could serve a student not receiving specialized instruction by a special-education teacher. For example, a student in general education with sensory-processing difficulties interfering with his or her ability to learn and complete assigned work could receive OT services to address the sensory-processing issues.

The DOE participants from both North Dakota and Utah cited lack of capacity at the DOE as one determinant affecting the states’ nonadoption of related service

guidelines. In both cases, a decision was made by inaction as opposed to an overt decision not to draft guidelines or to implement some alternative form of guidance. Further, Iowa and Texas reported similar reasons for nonadoption of guidelines in the current educational climate, also indicating budget cuts and the elimination of state- and district-level positions. Iowa and Texas each had one source who participated in the study, each individual acquainted with the researcher through work on a national-level AOTA task force related to school-based practice. Both individuals were OTs who (a) were generally considered national experts on school-based practice, (b) had authored numerous publications related to school-based OT practice, and (c) had participated on national-level task forces and committees related to school-based practice. Both individuals agreed the researcher could include their remarks on the condition of anonymity.

The individual from Iowa was a former DOE employee. During her tenure at the DOE, the state had written related service guidelines (last published in 1996). She explained that, when the state education “Chief” changed “a few years ago,” she and the PT consultant retired and the speech-language pathologist consultant’s role was transmogrified to an administrative assistant’s position. The Iowa contributor indicated that the therapy consultant positions were eliminated and that a new State Director of Education was brought in, resulting in “new directions of thought” (anonymous Iowa OT, personal communication, March 8, 2012). She indicated that “groups of therapists have pushed” for updating the document but “the state [has] not given time/funding due to new directions and requirements that need to be completed” (anonymous Iowa OT, personal communication, March 8, 2012). She believed the issue was “not dead” because

therapists in Iowa continued to advocate for the need for consistency in school-based practice across the state and for increasing the general public's knowledge about the role and scope of practice of OT in schools (anonymous Iowa OT, personal communication, March 8, 2012). The participant e-mailed a DOE contact on behalf of the researcher to see whether that individual would participate in a conversational exchange via phone or e-mail. After approximately 7 business days, the researcher sent a follow-up e-mail request but never received a response from the DOE employee.

The OT from Texas who agreed to comment on conditions in the state was the coordinator of an agency that contracted OT practitioners to school districts in Texas. This person took the initiative to draft a set of guidelines voluntarily for related service provision and planned to submit them to contacts at the state DOE. In the summer of 2011, the state special-education leader was "RIF'ed" because of budget cuts, and the DOE underwent a complete reorganization (anonymous Texas OT, personal communication, March 8, 2012). The Texas source reported, at the time of the discussion, a "leadership vacuum" existed because two leaders had resigned from the DOE in January of 2012, resulting in "no one who has any knowledge of related services" working at the DOE (anonymous Texas OT, personal communication, March 8, 2012). She expressed hopes that the project would move forward, commenting, "It is a work in progress that has not come to fruition" (anonymous Texas OT, personal communication, March 8, 2012). Both policy entrepreneurs from Iowa and Texas affirmed that OT practitioners in their respective states had expressed a desire for state-level guidance to assist with resolving the liminality of their roles and scopes of practice in schools and to facilitate implementation of best practices statewide.

The last state in the nonadopter group was Ohio, which proved to be an anomaly when compared with the other nonadopting states. While the rest of the states were either working to revise or adopt written guidelines or were taking no active policy stance, at the time of this study, the Ohio DOE was planning an innovative program to provide education and training to both OT and non-OT personnel to advance the understanding of the role and scope of practice of OT practitioners in schools. This pioneering initiative was being funded through DOE grants and was coming to fruition through the efforts of Cathy Csanyi, an OT employed at the Ohio DOE. Csanyi had been an occupational therapist since 1974. She had a diverse professional background, including work as a consultant, an adjunct faculty member, a trainer for Pearson in formative assessments and RTI, and an educational administrator in several capacities: principal, coordinator of a regional resource center, and special-education supervisor for two Ohio districts. She had also served in voluntary state association executive positions, including District President of the Akron Ohio OT Association and School-Based Practice Liaison to the Ohio OT Association. Her role at the time of this study was interim Specialty Consultant for the Office of Exceptional Children at the Ohio DOE. Her responsibilities included overseeing PT, OT, and adapted P.E. and providing guidance to districts on best practices for these service areas. She had worked at the DOE since July of 2011.

Csanyi secured grant funding for the novel program through the Ohio DOE. The project would be a collaborative effort with AOTA, designed to “address key issues of related service delivery in the state of Ohio” (C. Csanyi, personal communication, May 1, 2012). Csanyi explained a number of issues existed in Ohio related to the liminal role of OT practitioners in schools, including (a) pressure for therapists to see students

individually in an outdated “pull out” model (one district reported 91% of OT services provided in this fashion); (b) demand from parents for “pull out” services resulting in OTAs carrying maximum caseloads, thus doubling or tripling the caseload and workload of the supervising OT; and (c) a tendency to implement a “medical model” instead of the current best-practices trends toward health promotion, early intervening services, and inclusive, collaborative service provision (C. Csanyi, personal communication, May 1, 2012). Csanyi reported the goal of the initiative was to develop 16 state support teams housed by the state Educational Service Centers. The program would be a unified effort not only of the Ohio DOE and AOTA, but also in cooperation with Ohio State University, the Ohio OT Association, and parent mentors. Training would include face-to-face meetings throughout the state, online modules, and participant access to various AOTA documents related to school-based practice.

Csanyi designed this training program while circumventing existing paradigms favored by DOE administrators. At one point in time, the Superintendent of Instruction for the state eliminated all specialist positions at the DOE after implementing a pilot program called the *Ohio Improvement Process*, funded by an OSEP State Personnel Development Grant (SPDIG). He reversed his position after an OSEP audit in which the state was cited for the growing achievement gap between general-education and special-education students, and the specialist positions were reinstated at the DOE. Csanyi was the first person the DOE had hired for the OT/PT specialty position. After extensive advocacy efforts, Csanyi had accepted that the DOE would “not budge” on providing written related service guidelines. The DOE administration insisted that the federal laws,

state operating standards, and state licensure board could provide sufficient guidance and oversight (C. Csanyi, personal communication, May 1, 2012).

The nonadopter states had diverse explanations for the absence of current related service guidelines. Two states confirmed rival explanations to the premise that states with no current guidelines were not proceeding with initiatives to develop and implement some formal mechanism to direct related service provision. Connecticut was actively drafting new guidelines with the goal of publishing them in 2013, and Ohio had secured a significant amount of grant funding to implement a collaborative project with AOTA to provide extensive statewide training to both OT and non-OT personnel, scheduled to begin implementation later in 2012. Four states cited the common factors of (a) reduction in DOE personnel (in some instances including the elimination of positions with governance over related services); (b) lack of funding for developing and implementing voluntary state-level guidelines; and (c) inability to gain attention or traction for the issue at the state level for various reasons, ranging from the perception of there being no crisis or problem to the state seemingly ignoring street-level practitioners' pleas for policy action at the state level to assist with providing oversight and direction regarding the delivery of OT intervention in schools. In an effort to triangulate the data, the researcher sent each participant electronic copies of her notes within one day of the conversation with that participant, and participant feedback was added to the notes or corrections were made in accordance with the given feedback.

CHAPTER 6

APPLICATION OF POLICY DIFFUSION THEORY

Policy diffusion theory is one of several conceptual frameworks that provide at least a partial rationale for why a given state decides to adopt or not to adopt a specific policy. The policy-diffusion literature has identified numerous variables that may play a role in a state's decision-making process, including the degree of ideological similarity between states (Grossback et al., 2004), the vertical influence of the federal government (Berry & Berry, 2007), completion of a cost/benefit analysis to determine whether implementing the policy would be a good investment (Grossback et al., 2004), political composition of a state's government, media attention to a policy issue (Mazzoni, 1991; Soule & Earle, 2001), the effects of geographic proximity on state policy behavior (Foster, 1978; Walker, 1969), and the role of "occupational contact networks" (Walker, 1969, p. 895), encompassing the influence of policy entrepreneurs who participate in these networks in advocating for change at the state level (Balla, 2001; Mintrom & Vergari, 1998). Although each of these factors could play some role in a state's decision of whether to implement a specific policy, geographic proximity and the activities of a policy entrepreneur appeared particularly applicable to adoption of state guidelines for related service provision (RQ 5). Respondents in both the adopter sample of states ($n = 12$) and the nonadopter sample ($n = 6$) provided information in response to questions designed to elicit information about a specific state's exploration of neighboring states' policy actions and about participants' awareness of a policy entrepreneur who had the ear

of policy makers in the state or had an instrumental role in the mechanisms the state was using or planning to use to guide related service provision.

Most of the extant policy-diffusion literature reported that geographic proximity has moderate-to-strong effects on state policy-adoption trends. McLendon et al. (2005) found the highest probability for a state to adopt a policy in relation to its contiguous states to be 3-5 years. In their 2004 study of Indian gaming facilities, Boehmke and Witmer found social learning affected a state's decision of whether to expand the existing number of facilities in the state. The authors found the positive effect of geographic proximity became negative once three neighboring states had adopted policies favoring facility expansion. As discussed in Chapter 2, this reversal may occur as legislators monitor the intended and unintended consequences of an implemented policy in other states, resulting in a decision not to enact a policy if adoption may have undesirable fiscal or political ramifications. Finally, Mooney (2001) found inconsistent evidence to support the positive relationship between geographic proximity and policy ratification. Results of his study indicated only half of his sample had positive statistical significance for regional effects, causing Mooney to conclude "regional effect is neither always positive nor always constant" (p. 104).

In this present research, the results of a mixed methods analysis of a sample of 12 adopter states and six nonadopter states in relation to the implementation of written state level guidelines for related service provision did not appear to support a positive effect of geographic proximity on a state's adoption of written related service guidelines. The researcher's data-collection for this variable included document analysis, conversations with individuals from participating states, and electronic research to confirm the number

of editions of related service guidelines each adopter state had published to date and to verify accuracy of publication dates for all states included in this study. Table 6.1 shows each state, its adoption status, the number of contiguous states, and their adoption status.

Table 6.1

Number and Status of Contiguous States for Adopter and Nonadopter States (N = 18)

State	Adopter or nonadopter	Number of contiguous states	Number with guidelines
Vermont	Adopter	3	2 (1 before, 1 after)
Virginia	Adopter	5	3 (all before)
Wisconsin	Adopter	4	3 (1 same yr, 2 after)
North Carolina	Adopter	4	3 (1 before, 2 after)
South Carolina	Adopter	2	2 (both before)
Louisiana	Adopter	3	1 (1 after)
Illinois	Adopter	5	4 (3 before, 1 after)
Arkansas	Adopter	6	4 (2 before, 2 after)
Oklahoma	Adopter	6	4 (1 before, 3 after)
Missouri	Adopter	8	6 (all before)
Arizona	Adopter	5	2 (1 before, 1 after)
New Jersey	Adopter	3	1 (1 after)
Iowa	Nonadopter	6	3
Texas	Nonadopter	4	3
North Dakota	Nonadopter	3	1
Utah	Nonadopter	6	2
Ohio	Nonadopter	5	2
Connecticut	Nonadopter	3	2

Note. The “Number with guidelines” column shows the number of states that adopted written related service guidelines prior to the given state (labeled *before*) and those that adopted guidelines after the given state (labeled *after*) according to the first date of publication. Study data collected from document analysis of state related service guidelines.

Consultation with a statistician confirmed that the data were not appropriate for formal statistical analysis (J. Matthews-Morgan, personal communication, May 22, 2012). Four states in the adopter sample (Louisiana, North Carolina, Oklahoma, and New Jersey—approximately 33% of the sample) were the first in their geographic cluster to adopt written related service guidelines. Four states exhibited possible support for the hypothesis of McLendon et al. (2005), concerning a state adopting a policy within 3-5 years of neighboring states implementing a similar policy. Arizona, South Carolina, Virginia, and Arkansas all had at least one contiguous state that had adopted written guidelines within a 5-year period preceding their publication of written guidelines. Within the adopter group, four states did not clearly support or refute the hypothesis that geographic proximity would increase the probability of adoption. Iowa and Wisconsin both adopted guidelines in 1996, but there was no available information to determine which state adopted first. Comparing Illinois' five contiguous states with its implementation date of 2003 indicated three states adopted written guidelines 7-8 years before Illinois, falling outside of the 3-5 year window indicated by McLendon et al. Furthermore, Vermont's 2010 guidelines were generic in terms of special education, with no reference to OT. Thus, it was unclear whether other states had influenced Vermont policy makers' decision to publish general guidelines mirroring federal law instead of specific guidelines concerning related service delivery.

The nonadopter sample revealed mixed evidence for geographic proximity. Connecticut was in the process of becoming an adopter state, and the contributor from Connecticut indicated that the group working on the guidelines conferred with other states and reviewed existing guidelines from other states as they drafted the proposed

updated related service guidelines (S. Harvey, personal communication, April 25, 2012).

It is important to note that, at the time of this study, the Connecticut OT and PT state associations were the primary advocates for revising the outdated 1999 guidelines after approaching the DOE and forming a collaborative partnership. Reportedly, these state associations were completing most of the work in consultation with the DOE. Harvey verified that the state association committee members had consulted with OTs in Massachusetts who had recently engaged in revising that state's related service guidelines to gain input concerning recommendations for topical content and organization of the process for drafting the guidelines to optimize the use of the committee members' time and expertise. She remarked that the committee had also looked to AOTA for national-level resources for content to integrate into the state-specific guidelines. These comments affirmed the concept in the policy-diffusion literature of states' taking measures not to "reinvent the wheel" by turning to national-level resources (e.g., professional associations) and by examining the policy actions of other states, especially when they perceived the policy was a success in the other state and when the state was in close geographic proximity to the one considering adoption of a specific policy. (Massachusetts shares a border with Connecticut.)

Contrary to Connecticut, four states in the nonadopter group appeared to refute the hypothesis, with three states (Texas, North Dakota, and Utah) electing not to author written guidelines when contiguous states had done so (three of four of Texas' bordering states, one of three of North Dakota's neighboring states, and two of six of Utah's neighboring states). Furthermore, one state (Ohio) chose a policy alternative, although two of five contiguous states had written guidelines to provide direction on the

implementation of related services in public schools. The representative from Utah responded in the affirmative that Utah had examined other states' written guidelines, but the respondent did not respond to the part of the question asking how other states' policy actions influenced her specific state. Three of Utah's six neighboring states had written related service guidelines, with two of these published in the previous 10 years (Idaho, 2009, contents generic concerning special education with no information specific to OT; Colorado, 1987; Arizona, 2008).

Texas is the only state in the nonadopter sample that seemed to fit Boehmke and Witmer's (2004) findings that, when three contiguous states adopt a policy, the positive effects of geographic proximity become negative. In reviewing information about the contextual circumstances in Texas, the state's policy decision-making behavior appeared primarily driven by economic implications (lack of DOE fiscal resources, in particular). In terms of the policy context of related service guidelines, there is no positive or negative revenue effect on the state; therefore, it was unclear whether Texas truly replicated Boehmke and Witmer's findings. Alternatively, Texas may align with their findings if the state elected not to adopt guidelines because of a perception that this policy mechanism had not been successful in other states. According to the OT who wrote a draft of the guidelines and presented them to the DOE, the lack of traction for adopting guidelines was associated with DOE staff reduction and lack of existing staff's knowledge about related services in schools as opposed to a result of examining neighboring states' policy actions (anonymous Texas OT, personal communication, March 8, 2012).

The policy-diffusion literature indicated a second supposition that a positive relationship exists between the presence of a policy entrepreneur in a state and the probability that a state will adopt a policy when it is supported favorably by a field expert involved in professional organizations at the state and national levels. Mintrom and Vergari (1998) discussed the role of policy entrepreneurs in spurring action on a policy issue: “Most potential [policy] adopters base their judgments of an innovation on information from those who have sound knowledge of it and who can explain its advantages and disadvantages” (p. 128). They characterized a policy entrepreneur as a person who participates in both external and internal state networks in a specific policy arena, someone “culturally embedded, . . . who picks up the gist of the conversation,” has connections to influential people within the policy network, and is willing to take a risk to “bring new policy ideas into good currency” (p. 130). Balla (2001) also supported this relationship in his study of members of the National Association of Insurance Commissioners (NAIC). Balla postulated that the level of a state insurance commissioner’s participation in a NAIC committee would correlate with the likelihood that a state would adopt a model insurance act drafted by the NAIC. Balla posited that individuals who participate in national associations and committees may affect diffusion by providing states with information to “learn about current developments in their policy area, . . . the approaches that other states have taken to address particular problems” and that associations “provide institutional foundations for policy development” (p. 223).

The findings of the mixed-methods analysis of the two sample groups indicated inconsistent evidence for a positive relationship between state implementation of written related service guidelines and the active presence of a policy entrepreneur in the state.

The researcher shared the findings with a statistician to discover whether the data could be evaluated through formal statistical measures to increase the reliability of the findings and to use as a mechanism for data triangulation. Although this data set was conducive to a Chi-square analysis, the required number of five states with complete data sets was not achieved because of lack of responses from various participants who could provide the information necessary to perform the calculations (J. Matthews-Morgan, personal communication, May 22, 2012).

The sample of adopter states yielded one state (South Carolina) where an individual meeting the criteria for a policy entrepreneur (evidence of involvement at the national level) was actively advocating for the revision of existing guidelines. At the time of this study, this individual was an OT employed by the South Carolina DOE. However, she planned to relocate out of state and was unsure whether the DOE would replace her. She also was uncertain whether the state would pursue updating the guidelines after she left because she promoted the idea when her supervisor asked her to develop some projects related to her role as state OT/PT contact. Springer (personal communication, May 1, 2012) explained she was initially hired as the Assistive Technology Specialist for the DOE. She stated she was made the OT/PT contact for the state by default. No formal job responsibilities were assigned to the position, so as she noted, “I was given a lot of latitude as to what my job responsibilities are in that position” (S. Springer, personal communication, May 1, 2012). She expressed a need to develop and update best practice guidelines for the state. Springer stated, “It was really something I brought up, not something on their radar. From being in NC and working with a lot with other states, comparatively in SC, there is no direction for OTs/PTs

working in the school system” (S. Springer, personal communication, May 1, 2012). It was unclear whether the South Carolina DOE planned to replace Springer, and according to Springer, the fate of the project was unknown. The existing set of guidelines was published by the state OT association in 2009, but they have not been officially sanctioned by the DOE (S. Springer, personal communication, May 1, 2012).

Two states, Illinois and New Jersey, had policy entrepreneurs who had advocated in the past for state guidelines but, at the time of this study, were not engaging in efforts to update the existing guidelines. Cheryl Huber-Lee participated in an Illinois DOE-convened task force to draft related service guidelines published in 2003. The Illinois State Board of Education (ISBE) initially intended to adopt a manual of a special-education cooperative (the NIA) as the state level guidelines. Huber-Lee was uncertain “about the nature of the relationship between the ISBE and NIA and why their manual was chosen as a model” (C. Huber-Lee, personal communication, April 10, 2012). She speculated that, at the time, the NIA had a coordinator who was a physical therapist and was “very active at a high level both nationally and locally,” and that this person’s influence could be one of the reasons the NIA manual was selected by the state (C. Huber-Lee, personal communication, April 10, 2012).

In Illinois, most schools contract for special-education services with a cooperative, although some districts choose to provide special education services themselves. The Northern Illinois PT/OT Consortium of special education cooperative coordinators became aware of the DOE’s intention to adopt the NIA manual as the state-level guidelines and sent a letter requesting a collaborative effort between the DOE and the Consortium to write guidelines that would be universally appropriate for use by

practitioners statewide. General concerns included that the NIA's manual "was unwieldy and specific to their organization, which served primarily low incidence populations" (C. Huber-Lee, personal communication, April 10, 2012).

The individual at the DOE assigned as related services liaison (Vaughn Morrison) agreed to the partnership. Huber-Lee described the writing and publication process as "slow," stating it took a year to write the document and another year to get the ISBE to give its final approval. She described Morrison as the project's "champion, who worked hard personally to push it through; it was his major project before he retired" (C. Huber-Lee, personal communication, April 10, 2012).

In response to a question inquiring whether the committee solicited input from individuals and organizations other than school-based practitioners, Huber-Lee responded, "The ISBE sought representation from professionals who were supervisors in different geographical regions of the state, knowing the significant differences between districts down state and those around the Chicagoland area" (C. Huber-Lee, personal communication, April 10, 2012). Huber-Lee's impression was the emphasis was on garnering professional input, and because those individuals interfaced with educators, families, and other non-OT personnel, they could "represent a variety of interests" (C. Huber-Lee, personal communication, April 10, 2012). In replying to questions about the DOE's plans to update the existing guidelines, Huber-Lee believed an update was unlikely for a number of factors, including (a) DOE personnel cuts causing "people's jobs [to get] bigger and bigger" and the lack of a current OT/PT liaison at the DOE, (b) budget cuts, and (c) the volunteers who worked on the project and were "still around [indicating]

it's too overwhelming to try to update it" (C. Huber-Lee, personal communication, April 10, 2012).

New Jersey had a similar scenario, in which a special-interest group advocated for state-level guidelines and provided volunteers to complete the project. In contrast to Illinois, the New Jersey special-interest coalition acted independently, without support or representation from the DOE. Dr. Estelle Breines worked on the initial set of written guidelines for the state of New Jersey (2007) on a voluntary basis, through her role as President of the state OT association. Breines acknowledged the need and significance of keeping the guidelines current but emphasized the prospect of taking on a revision project was too overwhelming. However, Breines led the state association in authoring and publishing the existing guidelines. The NJOTA board made the decision to draft guidelines after making "overtures to the state on many occasions from multiple directions" (E. Breines, personal communication, May 4, 2012). Breines indicated that the state association hoped

if we put the guidelines together, we could present them to the state and they would have a document that would at least represent something viable. Not only was this issue not on the radar, the DOE didn't want anything to do with it. (personal communication, May 4, 2012)

Breines commented that the NJOTA felt strongly about making an effort to address the common issues in school-based practice, especially for OT practitioners new to working in an educational context. She remarked, "It took many years before anyone got frustrated enough to do something. We wanted districts to have some way to judge whether OT in their setting was adequate" (E. Breines, personal communication, May 4, 2012). When the researcher asked whether the NJOTA planned to update the guidelines,

Breines replied, “This board is the most interested in these issues than anybody in the state, and they aren’t very interested” (personal communication, May 4, 2012).

Two adopter states had individuals who routinely updated the existing related service provision guidelines as part of their jobs at the respective DOEs (Louisiana and North Carolina). Neither individual met the criteria for a policy entrepreneur. Janice Fruge was the Assistant Director for the Division of Special Populations at the Louisiana DOE. Fruge was a special-education teacher prior to working at the Louisiana DOE and had been in the special education field for 33 years. Fruge explained that, in her role as program manager, one of her responsibilities was program monitoring. She described the impetus for publishing the initial set of written related service guidelines in 1984 stemmed from a need identified in the 1980s for “consistent policies and procedures that could be standardized statewide for OT and PT services in schools” (J. Fruge, personal communication, April 16, 2012). Fruge remarked that most therapists at that time were entering the school system with medically based training and it was evident that therapists needed direction on how to implement services in an educational context.

The original 1984 Louisiana guidelines were revised four times, in 1991, 1995, 2000, and 2006. Fruge indicated there were plans to update the guidelines in 2013. The 2006 edition was the most current and was the version available on the DOE’s website at the time of this study. A task force of OTs and PTs worked with Fruge to craft the 2006 edition over a one-year period. The committee had OT and PT representation from various parishes throughout the state and feedback from both the Advocacy Center in New Orleans and several parent support groups. Although not required by the state, the guidelines were presented to the Louisiana Board of Elementary and Secondary

Education for approval. Fruge noted that the DOE initially disseminated printed copies of the manual to each therapist and special-education director in the state. Currently, each new version is uploaded to the DOE's website. Fruge stated that the DOE provides "statewide training for all school-based therapists each and every time we revise the handbook" (personal communication, April 16, 2012). For the 2006 edition, the task-force members acted as trainers for the state. Conversations with 2006 task-force members confirmed that each parish had access to the manual and was responsible for disseminating it to its employees (G. Hill, personal communication, April 10, 2012; C. Watson, personal communication, May 5, 2012). In East Baton Rouge parish, senior therapists review the manual with new hires and the manual is reviewed annually at the beginning of each school year (C. Watson, personal communication, May 5, 2012). When asked about the effectiveness of the guidelines, Fruge indicated that, from the DOE's perspective, they had been "very effective as complaints and overall compliance issues have been significantly reduced" (personal communication, April 16, 2012).

The other state with a DOE employee who has updated the related service guidelines annually as part of her job responsibilities is North Carolina. Lauren Holahan, an occupational therapist employed as the OT Consultant to the NC Department of Public Instruction, began her job at the DOE in 2007, and the existing guidelines at that time dated from 1992. Holahan "needed something to organize my work and to refer people to; I was getting the same questions from people repeatedly, particularly school-based practitioners" (L. Holahan, personal communication, May 9, 2012). Holahan was based at UNC-Chapel Hill and occasionally had a fieldwork student from the university's OT program. Holahan and a fieldwork student drafted updated guidelines in 2008. She "sent

out the manual to the list of editors (included in the existing guidelines) for several review cycles until we reached consensus; the final edition was ready for distribution in 2009” (L. Holahan, personal communication, May 9, 2012). Holahan had notified her supervisors about the project and sent them the final edition per their request so they could give it final approval. Holahan remarked, “The vetting process was never concluded from my division at DPI. Eventually, I just posted it (on a self-created website). Never clear what the issues were and why my division never gave the final okay” (L. Holahan, personal communication, May 9, 2012).

When asked whether she had solicited input from individuals and organizations other than school-based therapists and higher education faculty, Holahan commented that she had “no input from outside stakeholders. If I were to do it again, I would solicit parent, support group and interest group input” (L. Holahan, personal communication, May 9, 2012). Holahan updated the guidelines annually, referring to it as “a working document” (L. Holahan, personal communication, May 9, 2012). To notify interested parties of any updates, Lauren would send out a blast e-mail with the link to a database of approximately 400 school-based therapists. She also reported that she was aware that three of the four OT preservice programs referred to the guidelines as part of the pediatric, school-based curricular content.

In response to questions about whether therapists receive any formal training on the guidelines, Holahan stated, “There is no oversight or administrative involvement; the guidelines are considered a practitioner tool” (L. Holahan, personal communication, May 9, 2012). Holahan indicated the state DOE had never considered completing an impact study, but she had had feedback from both OTs and non-OTs that the guidelines “help

others understand issues, role of OT, and their scope of practice in schools” (L. Holahan, personal communication, May 9, 2012).

Efforts to learn more about the remaining adopter states were unsuccessful. John Eisenberg, the Director of Instructional Support and Related Services at the Virginia DOE, whose professional background was in special education, voluntarily consented to participate in the study and elected to respond to the questions via e-mail. He indicated in his responses that he knew of an OT whom he considered a policy entrepreneur and stated he would ask whether he could give her contact information to the researcher. Unfortunately, that individual never responded, and Eisenberg did not reply to follow-up e-mails, so it is unknown whether this person (a) was a policy entrepreneur and (b) was actively advocating for updating Virginia’s state guidelines (2010). E-mails were sent to various individuals in the last five adopter states—Wisconsin, Arkansas, Oklahoma, Missouri, and Arizona—requesting their voluntary participation in the study, but no one from these states replied to these e-mail invitations.

The nonadopter states also had a seemingly random pattern in terms of their adoption decisions. Connecticut was in the process of becoming an adopter state because of the efforts of two individuals who fit the criteria for a policy entrepreneur (one OT and one PT). These individuals approached the DOE and requested the formation of a collaborative partnership to update the 1999 guidelines because of the associations’ concerns that the needs of school-based therapists were not being met by the existing guidelines and a desire to achieve consistent statewide practice standards. Ohio was another state, which—although not an adopter per se—was taking action to implement a

statewide education and training initiative as a result of the efforts of a policy entrepreneur who was both a DOE employee and an OT.

Other states had policy entrepreneurs who were actively advocating for state-level related service guidelines, but to date, their efforts have been unsuccessful. Both Iowa and Texas had OTs who were nationally acclaimed and had approached the state DOEs about the need for state-level guidelines. In Iowa, the OT was a former DOE employee whose position was eliminated after she retired. She suspected that Iowa's inaction was because of a reduction in DOE personnel and lack of funds to support any type of education or training program for OT and non-OT personnel. The OT in Texas voluntarily drafted guidelines and presented them to the DOE. At one point, there was some forward motion, but when the DOE reduced personnel and experienced budget cuts, the project was tabled in 2011.

It was unclear whether a policy entrepreneur worked to promote state-level guidelines or some other mechanism to provide direction on the implementation of related services in the remaining nonadopter states. The DOE participant in North Dakota could not name an OT whom she felt fit the criteria for a policy entrepreneur. In contrast to the DOE representative from North Dakota, Loving (a DOE employee in Utah) could identify an OT whom she felt met the criteria for a policy entrepreneur. She stated she would ask this individual for permission for the researcher to contact her, but no response came from either the identified OT or Loving. Therefore, it was not possible to assess whether this therapist was actively lobbying for the implementation of written guidelines or some other mechanism to provide guidance on the delivery of related services in Utah's schools.

CHAPTER 7

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The findings of this research study indicate one overarching theme: School-based OT is suffering from a professional identity crisis. Districts, therapists, families, and other involved parties have been grappling with differentiating between medically based and educationally based services. In addition, the trend has been away from isolated, pull-out services toward inclusive, collaborative services, changing the role of OT to that of a consultant for general- and special-education students, personnel, and programs.

Several factors appear to have contributed to the liminal role of OT practitioners in schools. On a national level, federal legislation has mandated public schools offer related services to students, but guidance on what related services “look like” and how they provide support to students to facilitate their receiving a free and appropriate education in the least restrictive environment are nebulous. Nor is there consistency in the treatment of practitioners in related services, despite comparable credentials. Speech-language therapy has been established in a unique dual role as both a special-education instructional service and a related service, giving speech-language therapists the latitude to serve students with speech and language issues as a stand-alone service and negating the need for a student to qualify for special education to receive speech-language therapy.

In addition, state implementation appears to have lagged behind federal law. Although the findings indicate a wide degree of variation in the quality and content of the existing state standards, none of the sample states had integrated all of the federal laws

that AOTA suggested support the role of OT in various elements of school-based practice. AOTA has an existing work group composed of OTs and DOE representatives who are drafting fact sheets that explain the role of OT in schools; however, a more intensive state-by-state campaign is needed to truly affect state- and district-level administrators' and legislators' understanding of the scope of practice of school-based OTs. The largest obstacle appears to be creating a paradigm shift from OT as service for special-education students to OT as a service for all students. This is just one example of the difficulty in generating change not only in educational systems but in the perceptions of people and programs. No longer is special education contained in a physical hallway in the building or in an isolated program; it is now a service that is part of the daily educational landscape, touching students of all ages and abilities. In addition to the need for a macrolevel overhaul of long-held beliefs about education, there is a need to create conversations between strangers in the same building. For example, how do we create truly inclusive, collaborative school cultures in which the talented and gifted program teacher does not immediately attribute a student's "messy" handwriting to boredom or laziness but actually considers whether the student's poor handwriting could have an underlying cause, such as low muscle tone and associated decreased muscle strength? Can we facilitate educational communities in which an instructor of English language learners requests an OT consultation for a student who leaves work incomplete to rule out the presence of visual problems as opposed to assuming the omissions are because of a language comprehension barrier?

These large-scale, complex problems—many intractable—do not lend themselves to short-term, speedy solutions. Instead, action is necessary on all fronts: national, state,

and local. At the national level, the existing advocacy coalition for OT is small. AOTA has one lobbyist in Congress and a political action committee completely reliant on member donations for funding. IDEIA gives OT the same opportunity as speech-language therapy by stipulating “states are granted authority under the IDEA regulations to deem services defined by the IDEA as ‘related services’ as ‘special education’ under state standards (i.e., statute or regulations)” (S. Harvey, personal communication, May 31, 2012). However, the profession would have to generate both national and state advocacy coalitions with the momentum and resources to work for changes to state legislation nationwide. While this seems a grandiose notion, it would provide a solution to many of the barriers cited for restricting the role of OT in schools: staff, funds, and the need to “attach” OT to special education. A precedent has been set by Ohio, whose state legislature passed a law deeming OT an instructional service, permitting it to stand alone. If states followed in the legislative footsteps of Ohio, making OT an educational instructional service, OT practitioners would have the ability to provide services to students in a more cost-effective manner. Instead of a student undergoing a comprehensive special-education assessment, an IEP process, and sometimes having consultative educational or speech-language services to enable the student to access OT, an OT would have the flexibility to assess the student’s needs and address them accordingly.

Another avenue to explore is the IDEIA Partnership, a national educational coalition comprised of individuals representing a gamut of educational disciplines. The IDEA partnership facilitates collaborative initiatives among individuals and organizations from various disciplines with the goal of encouraging the exchange of information and

ideas to facilitate improved educational opportunities for all students. Given the organization's focus on interdisciplinary collaboration and information sharing, the IDEIA Partnership could initiate a public-awareness campaign in conjunction with AOTA to increase global understanding about the role of OT at the national, state, district, community, building, classroom, and individual levels.

The findings of this study indicate widespread confusion about the role of OTs in schools. State leaders, educational administrators, principals, parents, teachers, and sometimes therapists themselves have difficulty achieving clarity because therapists differ in educational background and training, experience, and intervention philosophies. Despite a plethora of educational and informational initiatives from AOTA, state- and district-level personnel (including school-based practitioners) appear to be unfamiliar with and, therefore, underusing these resources. With no national template or recommended list of topical content to guide states in drafting guidelines for related services, states are generating documents based on their experiences and perceptions of school-based OT, not necessarily on the body of research delineating what constitutes best practice. Because the guidelines are voluntary, states are not required to provide any form of direction on related service provision, creating circumstances in which it is difficult to achieve statewide consistency and parity of services. A potential solution to this conundrum again involves AOTA. If AOTA adopted a set of basic guidelines that states could use as a basis for a manual, those guidelines could serve at least as a starting point for states to use to create or revise their guidelines. If AOTA does not want states to feel pressured to use a prescribed template, the association could, at minimum, provide a list of suggested topics for inclusion and a list of recommended individuals and

organizations who could supply valuable information on formulating a state-level manual for related service provision.

Separate from state government but also a primary contributor to the problem is the absence of curricular requirements for school-based practice in preservice OT and OTA programs. The research substantiated concerns about the lack of curricular requirements in OT preparatory programs. Brandenburger-Shasby (2005) surveyed 1102 school-based OTs in 2005, with a response rate of 41%. Her findings revealed that 80% of respondents reported they did not feel prepared for school-based practice “based on entry-level education alone” (p. 92). Furthermore, 49% of the survey participants indicated they received “zero school-based classroom hours,” and only “13% were provided with a separate school-based course” (p. 94). These findings are consistent with the results of Spencer, Turkett, Vaughan, and Koenig (2006), who surveyed 105 school-based therapists and concluded, “[Q]uestions do arise regarding the role of initial OT training, availability and nature of ongoing professional development, and the extent to which practicing occupational therapists access information about current and changing education policy” (p. 86).

AOTA houses the Accreditation Council for Occupational Therapy Education (ACOTE), although the two are distinct entities. AOTA is developing a school specialty certification (considered an advanced certification), and ACOTE is creating the programmatic and curricular requirements for both OT and OTA programs. Both committees are staffed by AOTA employees and volunteers, including representatives from higher education and practitioners. Although they have different missions, their goals to promote the profession and its credibility overlap, and it would seem prudent for

ACOTE and the various school special-interest sections at AOTA to dialogue with institutions of higher education to determine whether establishing some baseline competencies in school-based practice would provide entry-level professionals with some basic core competencies.

For practicing professionals, AOTA continues to fulfill its mission as a professional association by advocating for the profession and creating new practice areas in which OT can serve individuals, classrooms, schools, districts, and states. At the time of this study, AOTA was publicizing the benefits of involving OTs in bully-prevention initiatives, curriculum-planning committees (e.g., to select a handwriting curriculum or assist with universal design for learning), obesity-prevention programs, RTI, and student mental health. Although these emerging practice areas promote the profession and provide an ever-expanding role for school-based OTs, most therapists lack extensive training in school-based practice and may be reluctant to attempt to extend themselves into an innovative arena after reading an article or a one-page fact sheet or attending a weekend continuing-education course. The AOTA school specialty certification is focused on addressing this problem, yet historically, the four existing voluntary certifications have met with limited success. In 2011, only 30 therapists applied for the specialty certification programs (M. Louch, personal communication, December 10, 2011). Variables thought to contribute to low application rates include demanding and costly requirements to obtain certification, the lengthy completion process, high application and renewal costs, and lack of recognition and fiscal support from employers.

The most glaring omission in light of these research findings is the lack of any accountability or oversight provisions to ensure therapists review and understand existing

resources. Federal laws mandate related service providers in schools, and because states are responsible for enacting laws with fidelity and could lose both federal and state funds if found to be in noncompliance, it would behoove states to consider instituting some process for accountability and oversight to ensure therapists, administrators, and consumers understand the scope of practice for OT and the relevant provisions of federal and state laws. For example, states could instruct districts to disseminate a copy of the manual to each therapist at the beginning of the year, and the supervisor for related services could schedule a meeting to review key points and take attendance to ensure all therapists receive the information. Alternatively, therapists could take a required web-based course with a short examination or a certificate of completion that provides therapists with continuing-education credits. This approach would allow districts to track the dissemination of information and therapists' levels of comprehension according to examination scores, and it would incentivize practitioners because all states have a continuing-education requirement tied to state licensure renewal.

Furthermore, states could develop large-scale education and training programs and consider submitting a grant application to OSEP for state personnel development. Training could include both related service and nonrelated service personnel, families, and other interested parties. States could also submit grant applications to conduct needs assessment or impact surveys. One way to implement the training could include online self-paced modules with content explaining the linkages between OT school-based practice and relevant federal laws and including the following topics:

1. The role of OT and other related services under various federal laws using the AOTA document as a reference (see Appendix D);

2. The role of OT in the RTI and EIS process;
3. Examples of how OT can provide services at the state, community, district, building, classroom, and individual level;
4. Efficacy of a consultative, collaborative model using existing research as opposed to the pull-out model as the primary means of service delivery;
5. Modules on how to start programs or encourage OT participation in emerging practice areas, such as obesity prevention, bullying prevention, and positive behavioral intervention and supports (supported by IDEIA).

To facilitate compliance with requirements and licensure laws, it would be beneficial for states to make the contact or website information readily available to therapists, some of whom may be relocating to a state or working temporarily in a state through a contract agency. An integral piece of any educational and training program would be the inclusion of an assessment tool to evaluate the effectiveness and effect of the implemented program. States could incorporate results of preprogram design needs-assessment surveys and post-implementation impact studies into their grant applications.

The topic of related service guidelines lends itself to other research in ancillary areas. Future research could examine OT and OTA curricula to investigate whether and how school-based practice is integrated into the pediatric portion of their educational programs. Another unexplored area for qualitative research is a study of the state associations and their members who are voluntarily contributing their time and expertise to developing state-level guidelines. The state OT associations are independent interest groups with no official connection to AOTA and are typically staffed by volunteers. The many possible research questions concerning volunteer professional associations' efforts

to fill gaps in existing state policy include the following: What are the motivating forces driving state associations to take on these large-scale projects voluntarily? Are there common characteristics among the participating individuals?

This study had its limitations. To expand on this present research, the following are suggested:

- Future research could review all written state related service guidelines and replicate this study using the rubric developed herein, adding trained scorers so inter-rater reliability measures could be included in future studies.
- Future research could expand on this study by including all nonadopter states to determine whether additional factors have influenced states' decisions not to adopt written guidelines as a policy instrument and whether states are using other policy alternatives to guide related service provision, as this study found in Ohio.
- The researcher did not calculate inter-quartile scores, a limitation in the data analysis, because of lack of access to appropriate statistical software. A consideration for future research would be to calculate inter-quartile scores to identify potential outliers.
- A second statistically related limitation was the inability to conduct a Chi-square analysis to determine whether the activities of a policy entrepreneur in a state were associated with an increased probability of a given state adopting related service guidelines. If appropriate funding is available, it may be useful to expand the sample size to collect additional data to have an appropriate data set for Chi-square analysis of this relationship.

In conclusion, 6.5 million students received special education services under Part B of IDEIA in 2009, with a general perception in the educational community that the number of students receiving these services is increasing substantially each year (OSEP, 2010). Five million of these students were spending at least half of their school day in a general-education classroom. Special education is no longer a place or a program, yet most schools continue to struggle with implementing inclusive strategies. RTI continues to be regarded as an emerging practice area and intervention program 8 years after Congress included it in the 2004 reauthorization of IDEIA. School-based OT practitioners represent approximately 21 percent of the OT work force in the United States: 19,000 therapists are employed by the nation's public schools. This number does not take into account OTs working in early intervention and higher education and OT students, all of whom may have direct or indirect involvement in school-based practice. Given the large number of people affected by policies directing related service provision in public schools, the findings of this study prompted weighty philosophical questions for both present and future academicians, educational personnel, OTs, and researchers to ponder.

This study provided a glimpse into the policy area of related service provision in public schools and highlighted some of the issues states, districts, and individuals grapple with as they attempt to interpret federal law and shift perceptions about a field traditionally viewed as a medical profession to one becoming part of the daily educational landscape. The 16 participants in this study represented states with vastly diverse methods for providing guidance on related service provision in public schools. The discourse with these individuals caused the researcher to question whether written

guidelines are the most effective means of providing information and direction to individuals and organizations involved with related services. This present research revealed the need to continue to work to identify effective methods of providing education, training, and guidance to those directly and indirectly involved with school-based OT. Until the usefulness of OT practitioners is fully realized in educational settings, students, educators, and families will fail to receive the maximum benefits from these important educational team members.

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APPENDICES

APPENDIX A

VARIABLE LABELS AND SCORING CRITERIA FOR EACH POINT VALUE

Table A1

Variable 1: Scoring Criteria for References to Federal Legislation

0	1	2
<p>A) No mention of link between OT service providers in schools and Federal law</p> <p>-or-</p> <p>Mentions IDEIA and Section 504 but does not reflect most recent authorization of IDEIA (2004)</p>	<p>A) Mentions connection between school-based practice and federal law and must include IDEIA (2004), Section 504, and ESEA</p>	<p>A) Mentions connection between school-based practice and all relevant federal laws:</p> <ol style="list-style-type: none"> 1. IDEIA (2004) 2. ESEA (currently known as NCLB) 3. Section 504 4. ADA 5. Title XIX of the Social Security Act of 1965 (see attached).
<p>B) No explanation of how federal law mandates and defines <i>related services</i>.</p>	<p>B) Brief explanation of how federal law mandates and defines <i>related services</i>.</p>	<p>B) Clear-cut explanation of how federal law mandates and defines <i>related services</i>.</p>
<p>C) No discussion on how OT can be involved in general education and/or school-wide initiatives (e.g., bully prevention, obesity prevention, RTI).</p>	<p>C) Vague or limited discussion on how OT can be involved in general education and/or school-wide initiatives (e.g., bully prevention, obesity prevention, RTI).</p>	<p>C) Fully developed discussion of how OT can be involved in general education and/or school-wide initiatives (e.g., bully prevention, obesity prevention, RTI).</p>
<p>D) No discussion of laws or regulations pertaining to OTA supervision.</p>	<p>D) Inexplicit discussion of laws or regulations pertaining to OTA supervision.</p>	<p>D) Detailed discussion of laws or regulations pertaining to OTA supervision, and provision of websites or links to relevant documents.</p>

Note. NA^D = state does not employ OTAs in public schools.

Table A2

Variable 2: Scoring Criteria for State Regulations

0	1	2
A) Does not refer to state regulations or licensure laws governing occupational therapy or school-based practice and state regulations and/or a state licensure board exists.	A) Refers to state regulations (including licensure) by enumerating them but does not discuss provisions of regulations or how regulations affect OT practice.	A) Refers to state practice and licensure regulations and provides full explanation of how they affect practice.
	B) Does not provide websites, links, or other resources to locate information or provides incomplete information on how to locate information pertaining to regulations such as state licensure.	B) Facilitates compliance with state-level regulations by providing comprehensive information on how to locate resources (e.g., websites, links, contact person, and phone number). Link to licensure application.

Note. NA¹: state does not have state-level regulations for related service provision in public schools; NA²: state does not require state licensure to practice occupational therapy.

Table A3

Variable 3: Scoring Criteria for OT Scope of Practice in Public Schools

0	1	2
<p>A) Description of school-based practice does not reflect current research on best practices:</p> <ul style="list-style-type: none"> • Use of evidence-based interventions; provision of services through a combination of collaboration, direct services, and indirect services in the student's natural environment. • Appropriate use of "pull-out" service delivery. • Description or examples of role of OT at district, school, classroom, and individual (teacher, students) level. • Does not discuss collaboration with family, student (if appropriate), and outside professionals. 	<p>A) Limited or incomplete description of school-based practice reflecting current research on best practices.</p>	<p>A) Comprehensive discussion of the scope of practice of OTs in public schools; includes guidelines for the following:</p> <ul style="list-style-type: none"> • Use of evidence-based interventions; provision of services through a combination of collaboration, direct services, and indirect services in the student's natural environment. • Appropriate use of "pull-out" service delivery. • Description or examples of role of OT at district, school, classroom, and individual (teacher, students) level. • Discusses collaboration with family, student (if appropriate) and outside professionals.
<p>B) Description of school-based practice does not provide description of OT evaluation and intervention and role of OT as an IEP team member.</p>	<p>B) Scant description of school-based practice provides limited description of OT evaluation and intervention and role of OT as an IEP team member.</p>	<p>B) Extensive, detailed description of school-based practice; provides description of OT evaluation and intervention and role of OT as an IEP team member.</p>
<p>C) No reference to AOTA position paper (2011) on OT services in early childhood and school-based settings.</p>	<p>C) Brief reference to AOTA position paper or refers to outdated position paper (2004).</p>	<p>C) Refers to current AOTA position statement (2011) on school-based practice; provides bibliographic citation.</p>
<p>D) No delineation between medically based and educationally based OT services.</p>	<p>D) Ambiguous or limited differentiation between medically and educationally based OT services.</p>	<p>D) Clear, explicit differentiation between medically and educationally based OT services.</p>

Table A4

Variable 4: Scoring Criteria for Purpose and Objectives

0	1	2
A) No statement of purpose for the guidelines.	A) Insufficient or equivocal statement of purpose for the guidelines.	A) Evident statement of purpose for the guidelines.
B) No evidence of defined objectives.	B) Insufficient or equivocal evidence of defined objectives.	B) Evidence of defined objectives.
C) No mention of target audiences.	C) Insufficient or equivocal evidence of mention of target audiences.	C) Evident mention of target audiences.

Table A5

Variable 5: Scoring Criteria for Inputs

0	1	2
A) No discernible reference to who (organizations, individuals) provided input into development of state guidelines.	A) Few references to collecting input from various stakeholders.	A) Overt statement concerning collecting input from various stakeholders.
B) Guidelines authored by state DOE with no direct input from OT school-based practitioners or OTs with experience working in public schools.	B) Minimal direct input from OT school-based practitioners or OTs with experience working in public schools (e.g., one OT on an advisory board or task force).	B) Considerable direct input from OT school-based practitioners or OTs with experience working in public schools (e.g., OT representation on task force or advisory board; input from state OT association, state school therapist association, national association; input from OT licensure board members; input from IHE OT program faculty).

Table A6

Variable 6: Scoring Criteria for Oversight and Accountability

	0	2
A) Organization or individual designated as responsible for ensuring dissemination and implementation of guidelines.	No	Yes
B) Tangible incentives or sanctions for not implementing the related service provision guidelines.	No	Yes
C) Description of whom manual is disseminated to and how often.	No	Yes
D) Clear provision of training on state guidelines, including who does the training, who receives the training, and how frequently the training is conducted.	No	Yes
E) Overt initiatives to educate others on role of OT in school-based practice: educational administrators, health care professionals, educational personnel, community, families, students, other agencies (e.g., early intervention).	No	Yes
F) Statement regarding frequency of revision (e.g., coincides with reauthorization of IDEIA, ESEA)	No	Yes
G) State or state and collaborating organizations conduct periodic impact surveys.	No	Yes

Table A7

Variable 7: Scoring Criteria for Resources and Supports

0	1	2
A) The state does not conduct training or allocate funding for educating nontherapist personnel on the role of OT in public schools.	A) The state offers limited training opportunities for non-OT personnel, and funding is limited (partial or inadequate to build capacity statewide).	A) The state conducts statewide training through multiple venues and fully funds the education of non-OT personnel on the role of OT in public schools.
B) The state does not provide training (either web-based or live) or allocate funding to OTs employed in public schools to participate in training related to state guidelines.	B) The state offers limited training opportunities and allocates limited funding to OTs employed in public schools to ensure understanding of guidelines to increase fidelity of implementation.	B) The state conducts training of OT personnel on the related service provision guidelines as detailed in the state manual.

APPENDIX B

SAMPLE QUESTIONS FOR ADOPTER AND NONADOPTER GROUPS

The study included asking individuals who had direct or indirect input into the creation of the guidelines general questions about the document and the process of developing the document. The questions addressed the following:

- Verifying the currency of the document.
- Inquiring whether supplemental materials were available to provide guidance on related service provision (specifically occupational therapy services) in the public schools.
- Clarifying the purpose of the manual including whether there was an impetus for its development (e.g., reauthorization of IDEIA that resulted in changes in the federal law affecting related service provision).
- If not specified in the manual, confirming whether the state had laws or policies guiding related service provision in schools.
- Inquiring about the process for selecting task-force members who assisted with drafting the guidelines.
- Inquiring about the types of research or information the task force used in developing the practice guidelines (e.g., looking at other states' manuals on related service provision for content, scope, format).
- Inquiring about the process that went into the development of the manual (e.g., whether the task force met on a regular basis, whether other individuals

or organizations provided input through focus groups or surveys, how long it took to write the manual, whether it had to go through any legal or legislative channels for approval).

- Inquiring as to how the guidelines were disseminated and to whom, how frequently, and in what format (e.g., text, electronic, pdf, etc.).
- Determining whether there was an established timeline for revising the guidelines (e.g., with every IDEIA reauthorization, every 5 years, etc.).

For nonadopting states (or states whose guidelines were published 10 or more years previously), the researcher wanted to accomplish the following:

- Verify that there were no updated guidelines in use or that the guidelines were undergoing revision so had been pulled from a public website or other public forum.
- Inquire whether there were plans to revise to update the existing guidelines.
- Determine whether a state was using alternative methods to provide guidance on related service provision (specifically, occupational therapy services) in the state's public schools.

Target respondents for these sets of questions included state department of education personnel, board members of the state occupational therapy associations (elected from voluntary membership), members of the state licensure board, members of the school therapist association (if such an organization existed in a particular state), task-force members involved in writing the guidelines for a specific state.

If an respondent agreed to participate, I asked for the following information:

- Professional background

- Current position
- If the person was an occupational or physical therapist, whether he or she had any experience working in the school system, and if so, could he or she describe when (how long ago) and the number of years he or she worked in a school system.
- For occupational therapists, whether they had ever participated in a committee or task force or held an executive position at the American Occupational Therapy Association (AOTA). These positions are voluntary and noncompensated; some are elected positions.

Confidentiality/Anonymity

The task force participants are enumerated in a publicly available document. In participating in this study, they would be reasonably operating in their public and professional functions as part of a state-level task force. Although the concern of anonymity is a minor one, participants were given the option of using a pseudonym or being identified by only their professional affiliations.

State department of education personnel involved with the development of the written guidelines are listed in each state's manual and often on the department's website. Their involvement in creating the manual falls under their job description because state departments of education typically provide guidance on delivery of special-education services in the public schools and they act as state-level resources for professionals, parents, and other consumers.

AOTA publishes the names of committee, task force, and board members in their online and text publications and under links for specific special-interest groups,

committees, and so on. Therefore, individuals serving in one of these capacities were on public record as holding these positions or participating in the committee, task force, and so on. I asked all participants to sign consent forms acknowledging their voluntary participation in this study. The consent form explains that I may use their comments to support my research findings. I also notified them that the research findings may be used in future publications. I asked participants for their permission to do the following:

- Identify them by name and title
- Cite their comments as personal communication

I also asked them whether they would prefer to remain anonymous, being referred to only by generic descriptions (e.g., a participant from Texas or an employee of the state department of education in one of the southeastern states in the adopter group).

If the remarks of any participant could have resulted in damage to his or her professional credibility or in disciplinary action because of the nature of the comments, those specific remarks were not used in the study. I was not seeking to obtain personal opinions, beliefs, feelings, or perceptions of the participants. The purpose of my inquiry was to check the accuracy of my findings from a detailed document review and to obtain supplemental information. Each participant had the opportunity to review a draft copy of the dissertation prior to its final submission and had the option of withdrawing his or her participation and select comments at any time during the course of the study.

Sample Consent

I understand my involvement in the study is voluntary, and I may choose not to participate or to stop at any time without penalty or loss of benefits.

I understand the results of the research study may be published and, as a public official [or participant in a public policy process], my name and remarks may be used in the final report unless I have specifically requested that I remain anonymous. If there are any specific statements I wish to remain “off the record,” I understand I can express this desire at any time during the course of the study.

I understand there are no known risks or discomforts associated with this research.

I understand that by responding to this request in the affirmative via electronic response or electronic signature (unless another format is requested by the participant) I am agreeing to participate in the above described research project.

Signature of Participant

Date

APPENDIX C

ADOPTER STATES' MEAN SCORES FOR EACH VARIABLE AND CUMULATIVE SCORES

State (<i>N</i> = 12)	Publication date	V1	V2	V3	V4	V5	V6	V7	Total
Illinois	2003	6.0	3.0	7.0	2.0	2.0	0.0	0.0	20.0
Oklahoma	2005	6.0	3.0	6.0	2.0	2.0	0.0	0.0	19.0
Arkansas	2008	1.0	2.0	0.0	2.0	0.0	0.0	0.0	5.0
Louisiana	2006	3.5	2.0	5.0	2.0	2.0	2.0	0.0	16.5
New Jersey	2007	6.0	4.0	5.0	6.0	3.0	0.0	0.0	24.0
Arizona	2000, 2008	1.5	1.0	6.5	6.0	— ^a	0.0	0.0	15.0
N. Carolina	1992, 2009	7.5	4.0	8.0	6.0	4.0	2.0	0.0	31.5
Missouri	unknown, 2009 (rev. ed.)	4.5	4.0	5.5	6.0	0.0	0.0	0.0	20.0
S. Carolina	1997, 2009	4.5	3.0	5.0	6.0	— ^b	0.0	0.0	18.5
Vermont	2010	0.0	2.0	0.0	2.0	0.0	0.0	1.0	5.0
Virginia	2010	6.0	4.0	4.0	2.0	4.0	0.0	0.0	20.0
Wisconsin	1996, 2011	7.0	4.0	6.0	2.0	4.0	2.0	0.0	25.0

Note. Total possible score = 42 points.

^a Arizona V5 not scorable at this time. Introduction indicates that in 2000 version of the manual, the contents included input from a diverse range of individuals (educators, therapists, parents), but there is no information about who provided input into the revised 2008 manual or whether the DOE revised it only to update information pertaining to IDEIA 2004.

^b South Carolina V5 not scorable at this time. Although four OTs authored the 2009 version of the guidelines, they indicated three contributors and six reviewers also provided input into the manual. The list provides only names, without titles or professional affiliations. The 1997 manual has a list of five individuals. One person located through a Google search was an OT, but no contact information was available.

APPENDIX D

APPLICABLE FEDERAL LAWS AND THEIR RELEVANCE TO OT SCHOOL-BASED PRACTICE

Law	Influence on occupational therapy services
Individuals with Disabilities Education Improvement Act (IDEIA), P.L. 108-446	Federal legislation that specifically includes occupational therapy as a related service for eligible students with disabilities, ages 3-21 years, to benefit from special education (Part B) or as a primary service for infants and toddlers who are experiencing developmental delays (Part C).
Elementary and Secondary education Act (ESEA) Amendments, No Child Left Behind Act (NCLB), P.L. 107-110	Federal legislation that requires public schools to raise the educational achievement of all students, particularly those from disadvantaged backgrounds, students with disabilities, and those with limited English proficiency. It also requires that states establish high standards for teaching and student learning. While not specifically mentioned in the statute, occupational therapy is generally considered to be a pupil service under ESEA.
Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794; Americans with Disabilities Act (ADA, as amended); Americans with Disabilities Act of 2008 (ADAAA), P.L. 100-325	Civil rights statutes that prohibit discrimination on the basis of disability by programs receiving federal funds (Section 504) and by services and activities of state and local government (ADA and ADAAA). <i>Disability</i> is defined more broadly than in IDEA. Children and youth who are not eligible for IDEA may be eligible for services under Section 504 or the ADA, such as for environmental adaptations and other reasonable accommodations, to help them access and succeed in the learning environment. Each state or local education agency determines eligibility procedures for children and youth served under Section 504 or the ADA.

Law	Influence on occupational therapy services
Title XIX of the Social Security Act of 1965, as amended; Medicaid, P.L. 89-97	Federal-state match program providing medical and health services for low-income children and adults. Occupational therapy is an optional service under the state plan but mandatory for children and youth under the Early Periodic Screening, Diagnosis and Treatment (EPSDT) services mandate. Occupational therapy services provided in early intervention programs are frequently covered by Medicaid. School-based services also may be covered by Medicaid but also meet applicable medical necessary requirements and be educationally relevant.
Improving Head Start for School Readiness Act of 2007, P.L. 110-134	Federal program that provides comprehensive child-development services to economically disadvantaged children (ages birth-5 years) and their families, including children with disabilities. Early Head Start serves children up to 3 years of age. Occupational therapy may be provided in these settings under the Head Start requirements or under IDEIA.
Assistive Technology Act of 2004, P.L. 108-364, as amended	Federal program that promotes access to assistive technology for persons with disabilities so that they can more fully participate in education, employment, and daily activities.
U.S. Department of Agriculture Food and Nutrition Service (2001)	National School Breakfast and Lunch Programs are required to provide food substitutions and modifications of school meals for students whose disabilities restrict their diets, as determined by a doctor.

Note. Adapted from “Occupational Therapy Services in Early Childhood and School-Based Settings,” by G. Frolek-Clark, L. Jackson, and J. Polichino, 2011, *American Journal of Occupational Therapy*, 65(suppl. 6), p. S46-S54.