

A MIXED-METHODS STUDY EXAMINING THE EFFECTIVENESS OF  
PSYCHOSOCIAL OCCUPATIONAL THERAPY PREPARATION FOR THERAPISTS  
WORKING WITH CHILDREN IN SCHOOLS

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Title

A Mixed-Methods Study Examining the Effectiveness of Psychosocial

Professional Occupational Therapy Preparation for Therapists

Working with Children in School-Based Settings

By

Sarah Nielsen

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## ABSTRACT

Nielsen, Sarah Kaye, Ph.D., Program of Education, College of Human Development and Education, North Dakota State University, March 2011. A Mixed-Methods Study Examining the Effectiveness of Psychosocial Occupational Therapy Preparation for Therapists Working With Children in Schools. Major Professor: Dr. Kathy Enger.

This mixed-methods research study was conducted for the purpose of examining school-based occupational therapists' child psychosocial knowledge and attitudes, along with how therapists developed this knowledge and attitudes. Using a phenomenological qualitative approach, the study addressed the following broad research question: What meaning do school-based occupational therapists give to their experience in developing child psychosocial knowledge? Using a quantitative approach, a survey instrument was used to answer the following questions: (a) What level of child psychosocial knowledge and attitudes do school-based occupational therapists possess? (b) How do the following variables impact child psychosocial knowledge and attitudes: (1) level of education, (2) academic course content, (3) participation in mental health fieldwork, (4) application of psychosocial knowledge in non-mental health fieldwork, (5) professional practice experiences, and (6) continuing education experiences.

Snowball sampling was used to select 11 school-based occupational therapists for the phenomenological portion of the design. Data were analyzed using Giorgi and Giorgi's (2008) method of phenomenological analysis. Random sampling was used to select 1,000 school-based therapists who were mailed the Occupational Therapy Child Mental Health Questionnaire based upon The Teacher Mental Health Opinion Inventory (Morris, 2002). The response was  $N = 630$ . Data were analyzed using descriptive statistics and analysis of association.

Using the mixed-methods triangulation convergence model, where both quantitative and qualitative data were collected at the same time and the results converged during interpretation by comparing and contrasting them, the following conclusions were made: (a) school-based occupational therapists possess and use child psychosocial knowledge; however, they do not believe it is sufficient; (b) school-based occupational therapists have a difficult time articulating psychosocial knowledge; however, through case descriptions they are able to give many examples of psychosocial knowledge they use in practice; (c) school-based occupational therapists believe that holistic, occupation-based, and client-centered practice, along with additional psychosocial intervention strategies, help them maintain a positive attitude toward children with emotional disturbance; (d) school-based occupational therapists experience tension when attempting to apply their holistic, occupation-based, and client-centered practice in an environment that is typically focused on students changing to meet the environmental demands; (e) due to the constraints of the educational system and the IEP, school-based occupational therapists practice holistically by incorporating psychosocial knowledge in a hidden fashion; (f) school-based occupational therapists believe that mental health fieldwork and rich experiences with individuals who have mental illness is important to developing a comfort level with people who have mental illness; (g) school-based occupational therapists do not readily connect the learning from adult mental health fieldwork that they apply in their school-based practices.

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Finally, I would like to thank all of the occupational therapists who participated in this research study. School-based occupational therapists are remarkable individuals. They care greatly about providing the best interventions they can for the children they serve. Not only is their work admirable, but also their willingness to engage in research.

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## CHAPTER I. INTRODUCTION

Using occupation as a means of healing the mind and body, early occupational therapy intervention arose in the United States in the early 1900s out of the moral treatment movement which sought humane treatment for the insane (Crepeau, Cohn, & Schell, 2009). In addition to the moral treatment movement, Adolf Meyer is credited with the development of occupational therapy's holistic perspective on healing (Hussey, Sabonis-Chafee, & O'Brien, 2007). Meyer, who developed the first philosophical statement of occupational therapy, suggested that individuals be viewed as a complete and unified whole, versus a series of parts that require management (Hussey et al., 2007). Following World War I and World War II, the practice of occupational therapy with mentally ill patients shifted from a holistic design to a reductionist medically-based model due to the advent of the rehabilitation movement and the treatment of physical injury (Hussey et al., 2007; Kielhofner, 2009a).

Beginning in the 1970s, leaders in occupational therapy challenged the medically-based model and suggested a return to the holistic treatment of individuals through the use of occupation (Fidler, 1981; Gordon, 2009; Kielhofner, 2009b; Shannon, 1977; Yerxa, 1980). Several holistic, occupation-based models emerged (Canadian Association of Occupational Therapists [CAOT], 1997; Dunn, Brown, & McGuigan, 1994; Kielhofner, 1992, 2002, 2006; Schkade & Schultz, 1992). The American Occupational Therapy Association (AOTA) wanted occupational therapy to return to its holistic and occupation-based practice. AOTA's efforts to return to holistic and occupation-based practice were reflected in a variety of publications, such as "Uniform Terminology for Occupational Therapy" (AOTA, 1979, 1989, 1994) and "Occupational Therapy Practice Framework:

Domain and Process” (AOTA, 2002, 2008c). Along with practice framework documents, AOTA also developed official documents to assist therapists in applying psychosocial knowledge that was previously neglected by practicing therapists (AOTA, 2004, 2008a, 2008b, 2009c).

While the profession of occupational therapy called for a return to a holistic, occupation-based and client-centered practice, practicing therapists struggled in this endeavor (Gordon, 2009; Kielhofner, 2009b; Shannon, 1977). The profession is defined by the therapeutic use of occupations in order to enable individuals to engage in roles valuable to them. Occupational therapists address physical, cognitive, psychosocial, and other aspects of performance in order to increase health, well-being, and quality of life for their clients (AOTA, 2007c). Occupational therapy services are provided in many contexts, such as community-based physical and mental health, hospital-based physical and mental health, nursing homes, industrial rehabilitation, outpatient services, and schools. Challenges in providing holistic, occupation-based, client-centered therapy are prevalent across occupational therapy contexts and reflect the difficulty of developing a professional identity (Finlay, 2001; Hanson, 2009).

Occupational therapists enter the school-based team as a “related service” under the Individuals with Disabilities Education Improvement Act (IDEA, 2004). Occupational therapy services in schools are aimed at: “(a) improving, developing, or restoring functions impaired or lost through illness, injury, or deprivation; (b) improving ability to perform tasks for independent functioning if functions are impaired or lost; (c) preventing, through early intervention, initial or further impairment or loss of function” (§ 300.34). Reflecting the mechanistic approach to occupational therapy intervention adopted prior to

the 1970s, school-based occupational therapists reported their most frequent intervention was fine-motor dexterity (Barnes, Beck, Vogel, Grice, & Murphy, 2003). According to Barnes et al. (2003), occupational therapists address the psychosocial performance skills in school children, including attention span, self-control, organizational skills, managing transitions, interpersonal skills, and social conduct; however, psychosocial performance skills were used much less often than fine-motor skills.

School children who have psychosocial performance skill deficits may be identified as needing special education under the IDEA (2004) category of emotional disturbance:

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(c) Inappropriate types of behavior or feelings under normal circumstances. (d) A general pervasive mood of unhappiness or depression. (e) A tendency to develop physical symptoms or fears associated with personal or school problems.

(f) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section. (IDEA, 2004, § 300.8)

Whether children with emotional disturbances are referred to occupational therapy treatment for psychosocial performance skills or fine-motor performance skills in community or school-based settings, occupational therapists must utilize their psychosocial

knowledge to address children's psychosocial performance skills, not only to adhere to the holistic focus of the profession, but also to enable the child's success. A lack of psychosocial knowledge when working with children who have emotional disturbances may lead to therapists' feelings of ineptitude and to premature discontinuation of treatment, resulting in children's academic failure (Koller & Bertel, 2006).

Concerns have been raised about potential attitudes of occupational therapists toward children with emotional disturbance. Case-Smith and Archer (2008) administered a survey ( $n=555$ ) that identified several barriers school-based occupational therapists experienced in attempting to address psychosocial performance skills in practice. Some therapists reported that students with emotional disturbance are too difficult to work with, that disruptive behaviors interfere with setting and meeting goals. Therapists suggested that students with emotional disturbance are very violent and the nature of the disorder interferes with intervention (Barnes et al., 2003). Both Case-Smith and Archer (2008) and Barnes et al. (2003) found that some therapists believed disruptive behaviors prevent students from reaching traditional motor-based occupational therapy goals. Therapists did not use psychosocial knowledge to impact the treatment of motor-based goals in individuals with emotional disturbance.

A limited psychosocial knowledge base was a barrier for intervening with children who have emotional disturbance (Barnes et al., 2003; Case-Smith & Archer, 2008). Barnes et al. (2003) ( $n=476$ ) found that 19.2% of therapists felt not at all prepared, and 53.7% felt only somewhat prepared to work with children who experience psychosocial difficulties following their academic training. Role confusion was identified as a barrier. Not only were occupational therapists unsure of their role with children who have

emotional disturbance, but also other school-based team members did not support occupational therapy's role with these children (Barnes et al., 2003; Case-Smith & Archer, 2008).

Therapists have found it difficult to use holistic, occupation-based intervention in their daily practice, noting the difficulty in applying their psychosocial roots in this context (Barnes et al., 2003; Cahill, 2006; Case-Smith & Archer, 2008; Donica, 2009; Hahn, 2000). The profession has responded to this difficulty with a variety of practice articles and AOTA documents focused on providing strategies and models that guide occupational therapists in using psychosocial knowledge (AOTA, 2004, 2008a, 2008b; Case-Smith & Archer, 2008; Chandler, 2007; Jackson & Arbesman, 2005; Nave, Helfrich, & Aviles, 2001; Schultz, 2003). The primary cause of the profession's lack of involvement with children who have emotional disturbance has been the occupational therapy profession's overall acceptance of a limited role in school-based practice (Cahill, 2006; Donica, 2009; Hahn, 2000).

Although the psychosocial needs of children is an emerging area of occupational therapy (AOTA, 2009a), there has been a longstanding concern that occupational therapists practicing in pediatric settings leave their psychosocial roots behind them (Florey, 1989). Florey (1989) has called for child psychosocial knowledge as an entry-level practice skill to build upon throughout professional training. Even though the Accreditation Council for Occupational Therapy Education (ACOTE) accreditation standards call for addressing mental health across the life-span, including children (AOTA, 2007a), Case-Smith and Archer (2008) raised concern that academic preparation continues to focus primarily on adult mental health. Both Case-Smith and Archer (2008) and Barnes et al. (2003) showed



that, following their academic training, therapists did not feel well-prepared to intervene with children categorized with an emotional disturbance. Therapists may know more than they think, and their belief that they lack knowledge may be related to an acceptance of a limited role in school-based practice (Barnes et al., 2003; Cahill, 2006; Case-Smith & Archer, 2008; Donica, 2009; Hahn, 2000). Occupational therapists may also have negative attitudes toward children who have emotional disturbance, influencing the intervention they may provide to these children.

Although occupational therapy literature and AOTA official documents have strategies and models that school-based therapists may use to integrate psychosocial knowledge into practice, there is little understanding about the current knowledge and attitudes of school-based therapists. In addition, there is little insight about how school-based therapists develop their psychosocial knowledge and attitudes toward children with emotional disturbance. A more in-depth understanding of therapists' child psychosocial knowledge and attitudes, as well as an understanding of their experience in developing knowledge and attitudes, is needed. Measuring knowledge and experiences that contribute to that knowledge informs future curriculum development and continuing education content for fieldwork educators and practicing occupational therapists. Understanding current levels of psychosocial knowledge also provides evidence whether occupational therapists possess child psychosocial knowledge needed to treat children diagnosed with emotional disturbance in school-based settings. Measuring attitudes and how they are developed is important because current attitudes may be impacting the application of knowledge. Understanding how occupational therapists perceive children with emotional disturbance and how they came to their beliefs will allow the academic community and

fieldwork educators to consider educational experiences that foster the development of positive attitudes towards children with emotional disturbance.

The focus of this dissertation is the child psychosocial knowledge and attitudes of pediatric occupational therapists. Since most of pediatric occupational therapists practice in schools, school-based therapists will be the studied population. In addition to child psychosocial knowledge and attitudes, this study seeks to understand the experience of school-based occupational therapists in developing their knowledge and attitudes about children who have emotional disturbance. Knowledge gained from this study will be useful both to practitioners in the field who are struggling to incorporate psychosocial knowledge into practice and the academicians who prepare future therapists. Specifically, this knowledge may be used to modify the current academic curriculum and provide practicing therapists with continuing-education opportunities that address child psychosocial knowledge and attitudes. This study will also provide information for all members of the school-based team who work children who exhibit behaviors defined by the IDEA category of emotional disturbance.

### **Significance of the Problem**

Understanding occupational therapists' level of psychosocial knowledge and attitudes, along with the development of them, is significant for several reasons. First, for the professional identity of occupational therapy to have a unifying image, AOTA is calling for the construction of holistic, occupation-based practice regardless of the practice setting. Second, new educational standards require fieldwork educators and students to provide evidence for the application of psychosocial knowledge across practice settings, yet school-based occupational therapists suggest they do not have the knowledge needed

(Barnes et al., 2003; Case-Smith & Archer, 2008). Finally, school-based mental health literature reports that children with emotional disturbances are failing at an alarming rate, raising the need for all school-based professionals to be educated regarding child psychosocial knowledge in order to improve the services that children who have emotional disturbance receive (Koller & Bertel, 2006; U.S. Department of Education, 2006).

The accrediting body of occupational therapy is called the AOTA Accreditation Council for Occupational Therapy (ACOTE). Due to AOTA's vision of holistic practice, in 2008 occupational therapy education activated ACOTE accreditation standards that require evidence of psychosocial knowledge in all practice contexts (AOTA, 2007a). ACOTE accreditation standards require that occupational therapy education programs use AOTA's emerging practice areas in their curriculums. By 2009, AOTA identified the psychosocial needs of children as an emerging practice area (AOTA, 2009a). Although occupational therapy education had long addressed adult mental health, child mental health had not been consistently targeted in course content (Case-Smith & Archer, 2008). In addition, occupational therapy literature discussing psychosocial needs of children was limited. A reorganization of occupational therapy's role in treating the psychosocial needs of children has become necessary (Barnes et al., 2003; Cahill, 2006; Case-Smith & Archer, 2008; Donica, 2009; Hahn, 2000).

There is a lack of a clear and unifying consensus that allows for a widespread understanding of the occupational therapy profession (AOTA, 2009a). AOTA and leaders in the field have suggested a return to practice focused on original paradigms of the profession: (a) interaction among person, (b) occupation, and (c) environment (Kielhofner, 2009b). In 2003, with establishment of AOTA's centennial vision as a road

map to its 100th anniversary in 2017, AOTA called for revisiting the occupational therapy curriculum in order to ensure the future of occupational therapy. Reinforcing its commitment to holistic practice, the AOTA centennial vision has highlighted the need for using psychosocial knowledge in pediatric practice by defining occupational therapy with children who have emotional disturbance and occupational therapy in school-based mental health as emerging practice areas (Moyers, 2007).

The “Philosophy of Occupational Therapy Education” (AOTA, 2007d) states that it is the responsibility of occupational therapy educators to monitor emerging knowledge and technologies in the field of occupational therapy. It is the role of the occupational therapy educator to consistently reinforce the development of new knowledge that is reflected in the curriculum in order to ensure well-prepared therapists for the future. Occupational therapy educators rely not only on current literature, but also on feedback from practicing therapists, societal trends, and the American Occupational Therapy Association (AOTA) for identifying emerging knowledge important to the field of occupational therapy. The *Occupational Therapy Model Curriculum* (AOTA, 2009b) outlines curriculum development that focuses on AOTA’s vision for the future, which reflects both established and emerging practice areas. The mental health needs of children is an emerging practice area that must be reflected in occupational therapy educational curriculums. AOTA has proposed the “Blueprint for Entry-Level Education” (AOTA, 2010a) which was developed to infuse new content related to the AOTA’s vision into academic curriculum. Suggested curriculum content is reflective of holistic, occupation-based practice that includes the development of psychosocial skills for practice with emotionally disturbed children in school-based settings.

Since addressing children with psychosocial issues is an emerging practice area (AOTA, 2009a) and since therapists indicated that they leave the academic setting ill-prepared to treat children with emotional disturbance (Barnes et al., 2003; Case-Smith & Archer, 2008), it is important to comprehend the type of child psychosocial knowledge therapists currently hold. Although occupational therapists indicate they do not have the knowledge needed to intervene with children who have emotional disturbance, the extent or content of that knowledge has never been measured in practicing therapists. Because occupational therapy education has always included mental health instruction, a starting point is to measure general child psychosocial knowledge and attitudes held by therapists practicing in school-based settings. Although this is only a starting point, it offers clarification about whether therapists lack general knowledge about child mental health. In addition, measuring the attitudes of practicing occupational therapists about children with emotional disturbance will provide insight into whether attitudes may play a factor in working with these children. Both general knowledge and attitudes can be addressed in academic course content to prepare future therapists.

Occupational therapy education encompasses both academic and fieldwork components (AOTA, 2007a). Fieldwork may be the most influential learning experience students engage in during occupational therapy education (Atwater & Davis, 1990; Bonello, 2001; Cohn & Crist, 1995; Crowe & Mackenzie, 2002; Hays, 1996). Learning occurs through professional modeling and fieldwork is the place where that knowledge is first applied (AOTA, 2003). Current ACOTE accreditation standards illustrate the need for integration of psychosocial knowledge in all occupational therapy practice settings (AOTA, 2007a). Although a variety of standards represent the integration of psychosocial

knowledge into practice, standard B.10.15 (AOTA, 2007a) specifically states: “The program will provide level II fieldwork in traditional and/or emerging settings, consistent with the curriculum design. In all settings, psychosocial factors influencing engagement in occupation must be understood and integrated for the development of client-centered, meaningful, occupation-based outcomes” (AOTA, 2007a, p. 661). In order to educate occupational therapists to use holistic, occupation-based practice in school-based settings, fieldwork educators must be able to engage in using psychosocial knowledge in practice. Because practicing school-based therapists indicate a deficiency in child psychosocial knowledge (Barnes et al., 2003; Case-Smith & Archer, 2008), it is essential that academic programs meet the required standard in order to effectively treat children in school-based settings.

A primary occupation of childhood is school participation. School participation involves not only learning about academic subjects, but also learning how to interact and get along with others. For children with psychosocial performance skill deficits, there is often a disruption in engaging in these occupations. Children with emotional disturbances display distractibility, impulsivity, noncompliance, aggressiveness, and poor independent work skills, all of which interfere with academic success (Carr & Punzo, 1993). A lack of social-emotional skills and emotional health impact a child’s successful engagement in the educational setting (Koller & Bertel, 2006; Weist & Paternite, 2006).

A number of students suffer from emotional disturbance. One in five students in a classroom suffers from a diagnosable mental illness (Koppelman, 2004). The Centers for Disease Control and Prevention (CDC, 2009) reports that approximately 10% of children between the ages of 5 and 17 have serious difficulties with emotions or behaviors per

parent report. The most recent information available from the United States Department of Education (2006) reports that approximately 476,640 children ages 6-21 are being served under the IDEA (2004) category of emotional disturbance. These statistics do not account for those students who are at risk or have symptoms that do not meet criteria for a diagnosis, yet are struggling in the school system due to emotional difficulties.

Current school-based mental health practice is influenced by a variety of laws and studies completed at the federal level. The Education for All Handicapped Children Act of 1975, later reauthorized as the Individuals with Disabilities Education Act (IDEA, 2004) was the first law to require schools to provide services to children with emotional disturbance (Kutash, Duchnowski, & Lynn, 2006). Kutash et al. (2006) reported that the No Child Left Behind Act of 2001 impacted school mental health practice, as it calls for enhancing emotional well-being through character education, violence prevention, and programs for children who are at risk due to low income. The President's New Freedom Commission on Mental Health (2003) suggested that today's mental health care is not adequate. The goals of the commission addressed earlier intervention, community-based treatment, evidenced-based practice intervention for children, and school-based mental health.

Weist and Paternite (2006) suggested that school-based mental health is an emerging field with many ongoing challenges. One such challenge is adequately training all individuals on school teams. Koller and Bertel (2006) suggested that preservice training for all school-based personnel is not sufficient to equip individuals to work with children who have emotional disturbance. In addition, Koller and Bertel defined strength-based performance standards that all individuals working in schools should have in

preservice training, a shift from typically identified individuals on school mental health teams to a school-wide approach to mental health treatment. Koller and Bertel's strength-based model focuses on prevention, early intervention, and integration of services for all children. This strength-based model is further defined based upon intervention at a school-wide level; a selective or targeted level; and an intensive, individualized intervention level (Koller & Bertel, 2006).

Recent data raise concern about the services students with emotional disturbance receive, and the skills and resources available for their teachers. The U.S. Department of Education (2006) reported that students with emotional disturbance have the lowest graduation rate, with only 38.4% graduating during the 2003-2004 academic year. In addition to high dropout rates, 16.9% of these students are educated outside the regular education environment. According to Bibou-Nakou, Stogiannidou, and Kiosseoglou (1999), teachers and paraprofessionals serving students with emotional disturbance are more likely to seek reassignment or leave their position than others in education. Moherrek and Sopko (2006) noted that there is a shortage of school personnel trained to address the mental health issues of children. Merrell and Walker (2004) stated: "Clearly, the state of affairs regarding the education of students with significant behavioral, social, and emotional problems in American schools is dismal" (p. 900).

Current school-based mental health practice has not resulted in high rates of success for students with emotional disturbance, and work is needed to improve outcomes for these students. Because school-based mental health is still emerging (Weist & Paternite, 2006), now is the time for occupational therapy, with its rich history in addressing mental health, to revisit child psychosocial knowledge and attitudes of school-



based occupational therapists in order to gain an understanding of therapists' experience in developing knowledge and attitudes regarding children who have emotional disturbance. As the entire school-based mental health practice moves forward with a new intervention model, it is important that occupational therapy look at how its holistic profession can assist in improving outcomes for students who have emotional disturbance.

This study will be important to academic faculty, future therapists, and current therapists by providing an understanding of current psychosocial knowledge and attitudes held by school-based occupational therapists along with how these therapists developed psychosocial knowledge and attitudes. Insight gained from this study will improve the content and application of psychosocial knowledge and attitudes in academic and fieldwork curricula. Findings from this study will assist in developing continuing education for practicing therapists who also serve as fieldwork educators. Revisiting academic curriculum, fieldwork curriculum, and continuing education with the findings of this study, will allow for improvement in developing holistic, occupation-based therapists working in schools, which is consistent with AOTA's centennial vision. Most importantly, by impacting psychosocial knowledge and attitudes in academic, fieldwork, and continuing education curriculum, the intervention school-based therapists provide to children with emotional disturbance will improve. Improving the occupational therapy treatment children with emotional disturbance receive is one step in improving the child's educational outcomes.

### **Purpose Statement**

This mixed-methods study will examine school-based occupational therapists' child psychosocial knowledge and attitudes, along with how therapists develop this

knowledge and attitudes. A triangulation convergence model design will be used. The triangulation convergence model design involves different but complementary data being collected on the same topic in order to bring together the strengths of quantitative and qualitative methods (Creswell & Plano Clark, 2007; Gay, Mills, & Airasian, 2006). Convergence models allow for the collection of quantitative and qualitative data at the same time, while converging results during interpretation (Creswell & Plano Clark, 2007). A quantitative instrument measuring general child mental health knowledge and attitudes will be used to gain an understanding of the current level of knowledge and attitudes held by school-based occupational therapists. This quantitative instrument will gather data from school-based occupational therapists for the following variables: (a) level of education, (b) academic course content, (c) participation in mental health fieldwork, (d) application of psychosocial knowledge in non-mental health fieldwork, (e) professional practice experiences, and (f) continuing education experiences. The previously stated variables and the current level of knowledge and attitudes will be assessed for potential relationships. Concurrent with this data collection, a qualitative phenomenological approach will be used. Phenomenology studies individuals who have had firsthand experience with the phenomenon of interest to capture the way the phenomenon is experienced as closely as possible (Giorgi & Giorgi, 2008). Using phenomenology will allow for rich description of occupational therapists' experience in forming psychosocial knowledge and attitudes, and will assist in explaining the quantitative instrument data. Although understanding levels of psychosocial knowledge and attitudes informs the current status of school-based occupational therapists, it does not provide insight into the experiences that impact the development of psychosocial knowledge and attitudes. Insight

into the development of psychosocial knowledge and attitudes is important for improving both academic and continuing education for school-based occupational therapists and for effectively treating children in school-based settings.

Results of this study will increase the understanding of school-based occupational therapists as they incorporate psychosocial knowledge into education and practice to enable a more holistic, occupation-based practice. As both AOTA's (2009a) centennial vision and the Accreditation Council for Occupational Therapy Education (AOTA, 2007a) call for a return to holistic, occupation-based practice and evidence of it, it is pertinent to return to practicing therapists who impact the profession through both practice and serving as fieldwork educators for future therapists.

### **Research Questions**

Qualitative methods will be used to answer the following broad research question: What meaning do school-based occupational therapists give to their experience in developing child mental health knowledge and attitudes? Subquestions will include: (a) What experiences have influenced the development of child psychosocial knowledge and attitudes for school-based occupational therapists? (b) How have different contexts (academic, fieldwork, and practice) influenced the development of psychosocial knowledge and attitudes for school-based occupational therapists? (c) What are the key constituents that influence the development of child psychosocial knowledge and attitudes for school-based occupational therapists?

Quantitative methods will be used to answer the following research questions: (a) What level of general child psychosocial knowledge do school-based occupational therapists currently possess? (b) What are the attitudes of school-based occupational

therapists toward children with emotional disturbance? (c) How does the level of general child psychosocial knowledge and attitudes of school-based occupational therapists compare to teachers' general child psychosocial knowledge and attitudes? (d) Is there a difference in knowledge and attitudes based upon level of preparation (bachelors, masters, or doctoral)? (e) Is there a relationship between the level of general knowledge or attitudes and the level of specific child mental health course content in therapists' academic curriculum? (f) Is there a difference in knowledge and attitudes between therapists who completed mental health fieldwork and those who did not? (g) Is there a relationship between the level of general knowledge or attitudes and the incorporation of psychosocial knowledge into non-mental health fieldwork? (h) Is there a relationship between general knowledge or attitudes and continuing education courses specific to mental health since graduating? (i) Is there a relationship between general knowledge or attitudes and practice experiences with children who have emotional disturbance?

### **Assumptions**

It is assumed that occupational therapists are familiar with the foundations of the occupational therapy profession, that care should be holistic and occupation-based. Holistic care means that the occupational therapist will view all facets of the individual, including mind, body, and spirit, along with the impact of the environment on the client. Occupation-based refers to participation in activity meaningful to the client. Based upon ACOTE accreditation standards (AOTA, 2007a), it is assumed that occupational therapists are provided with an education that is holistic in nature and includes child psychosocial knowledge to equip therapists to work with children who have emotional disturbance. However, an assumption is being made that holistic occupational therapy education may

emphasize adult-based psychosocial knowledge. An adult-based psychosocial knowledge focus has resulted in practicing occupational therapists with little knowledge about childhood disorders in the Diagnostic and Statistical Manual of Mental Disorder-IV (American Psychiatric Association [DSM-IV-TR], 2000) evidenced-based intervention guidelines for childhood mental health disorders, and the application of occupation-based models for children with emotional disturbance. It is also assumed that most school-based practitioners experience difficulty in transferring psychosocial knowledge to the school-based therapy context for a variety of reasons, including a lack of child psychosocial knowledge and experience. It is further assumed that therapists who had fieldwork experiences in mental health or had supervisors in non-mental health fieldwork who facilitated the inclusion of psychosocial knowledge into daily practice may be more inclined or confident in using psychosocial knowledge. The assumption is made that school-based occupational therapists have had little opportunity for continuing education related to children with emotional disturbance.

### **Definition of Terms**

*Emotional Disturbance:* Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers. (c) Inappropriate types of behavior or feelings under normal circumstances. (d) A general pervasive mood of unhappiness or depression. (e) A tendency to develop physical symptoms or fears associated with personal or school problems. (f) Emotional disturbance includes

schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section. (IDEA, 2004, §300.8)

*Fieldwork Education:* Level I fieldwork is used to introduce students to fieldwork experience, to apply knowledge to practice, and to develop an understanding of client needs. The goal of Level II fieldwork is to develop competent, entry-level, generalist occupational therapists. Level II experiences are integral components of the educational program. The focus is on the application of purposeful and meaningful occupation and research, administration, and management of occupational therapy students. It is recommended that students be exposed to a variety of clients across the life-span and in a variety of settings. Twenty-four weeks of Level II fieldwork are required (AOTA, 2007a).

*Holistic Practice:* Holistic practice is viewing the individual as a completed unified whole (Hussey et al., 2007). Holistic practice that considers mind, body, and spirit of the individual (Finlay, 2001).

*Occupation-Based Practice:* "Occupation-based practice, although concerned with enabling occupational performance, also includes the meaning-making aspects of therapy: the process of helping a person live successfully and confidently in the social world" (Price & Miner, 2007, p. 441). "Supporting health and participation in life through engagement in occupation" (AOTA, 2008c, p. 626).

*Occupational Therapist:* An occupational therapist is a graduate of an occupational therapy program accredited by the Accreditation Council for Occupational Therapy Education who has passed the national certification examination and meets state requirements for licensure/registration (AOTA, 2009c).

*Occupational Therapy:* AOTA (2007c) defined occupational therapy as the therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of participation in roles and situations in home, school, workplace, community, and other settings. Occupational therapy services are provided for the purpose of promoting health and wellness and to 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 the physical, cognitive, psychosocial, and other aspects of performance in a variety of contexts to support engagement in everyday life activities that affect health, well-being, and quality of life. (p. 3)

*Occupational Therapy Theory:* “Theory concerning occupation, how occupation influences health and well-being, and how occupation can be used therapeutically to enable people to engage in those occupations they value most” (Crepeau et al., 2009, p.429).

*Psychosocial Knowledge:* AOTA (2010) suggested the following knowledge based on science: psychology, sociology, occupational science, occupational science, neuroscience, pathophysiology, and therapeutic use of self. Threshold concepts for psychological support include motivation, self-efficacy, affect, mood, identity, self-concept, self-esteem, emotional regulation, coping, well-being, and life balance. Skills required include assessment, intervention planning, coaching, group skills, activity analysis, self-management strategies, use of virtual tools, and therapeutic use of self.

*Psychosocial Performance Skills:* “Performance skills are the abilities clients demonstrate in the actions they perform” (AOTA, 2008c, p. 640). For the purpose of this study, psychosocial performance skills include emotional regulation skills, cognitive skills,

communication and social skills, and sensory perceptual skills related to sensory modulation.

*School-Based Mental Health:* School-based mental health is generally understood as any mental health service provided in a school setting (Kutash et al., 2006).

*School-Based Practice:* Occupational therapy practice is “designed to enable students to participate in, and benefit from, a curriculum that prepares them for further education, employment, and independent living” (Muhlenhaupt, 2009, p. 890). Practice focuses on the student, the curriculum, and the setting and situations in which education occurs (Muhlenhaupt, 2009).

*School-Based Settings:* For the purpose of this study, school-based settings include all settings in which formal K-12 education occurs (Muhlenhaupt, 2009).

*Therapeutic Use of Self:* The therapists “planned use of his or her personality, insights, perceptions, and judgments as part of the therapeutic process” (Punwar & Peloquin, 2000, p. 285).

### **Delimitations of the Study**

The quantitative component of this study will be limited to school-based occupational therapists who belong to the AOTA School System and Early Intervention Special Interest Section and who select “school” as their primary work environment. The qualitative portion of the study will be limited to 9-12 school-based occupational therapists attending AOTA’s 2010 National Annual Conference or located in North Dakota, Minnesota, or South Dakota. The limitations of the population will impact the generalizability of the study. The study will only address school-based occupational



therapists' general child psychosocial knowledge and attitudes along with their experiences in developing this knowledge.

### **Organization of the Remaining Chapters**

Chapter 2 discusses the literature relevant to this study, including the historical context of children's mental health, school-based mental health, occupational therapists' attitudes toward mental illness, perceptions of school-based occupational therapists, current school-based mental health practice, and occupational therapy education. Chapter 3 presents the mixed-methods used in this study, including the quantitative questionnaire and qualitative phenomenology, along with the sampling procedures and data analysis methods. Chapter 4 presents qualitative and quantitative findings of the study separately. Chapter 5 presents a comparison and contrast of the qualitative and quantitative findings along with discussion of the literature. A summary of the study and its implications along with recommendations for future research are also provided in Chapter 5.

## CHAPTER II. LITERATURE REVIEW

### The Historical Context of Children's Mental Health

Few professionals recognize the depth and complexity of the emotional and behavioral disorders of America's children (Knitzer, 1993). The first major report on the status of children's mental health was produced by the Children's Defense Fund (CDF) in 1982 entitled: *Unclaimed Children: The Failure of Public Responsibility to Children and Adolescents in Need of Mental Health Services* (Knitzer, 1982). This seminal work highlighted the lack of substantive data in the United States on children's mental health and identified four problems related to children's mental health. First, state mental health departments viewed meeting the needs of children and adolescents who have emotional and behavioral problems as a low or nonexistent priority, with over half of the states not assigning staff solely to children and youth. Second, there was a lack of coordination between public agencies serving children at the state level including juvenile justice, child welfare, and special education. Third, a gap existed between epidemiological projections of need and actual service reported. Two-thirds of children and adolescents who needed mental health services either received no services or received inappropriate ones. The fourth point in the report stated that services did not meet the complex, multiple needs of the children and families. For instance, between 40% and 60% of youth in psychiatric hospitals did not need to be hospitalized. For those children hospitalized, the help amounted to evaluation after evaluation with few community services to meet children's needs (Knitzer, 1982).

Following Knitzer's (1982) Children's Defense Fund study, Congress authorized the creation of the Child and Adolescent Service System Program (CASSP) in 1984 under the National Institute of Mental Health (NIMH) (Meyers, 1985). CASSP provided

competitive challenge grants to states to improve children's mental health in several specific areas: (a) to enhance state mental health leadership for children, (b) to work collaboratively with other state agencies serving children, (c) to improve the array of community-based mental health services to include intensive crisis services, day treatment, therapeutic foster care, and case management, and (d) to strengthen family-based advocacy to be more responsive to the needs of children and families with varied cultural traditions and roots (Knitzer, 1993; Roberts, Blount, Lyman, & Landolf-Fritsche, 1990; Stroul & Friedman, 1985).

In addition to competitive grants to states, CASSP also established support for reinventing children's mental health services through the funding of a technical assistance arm at the Georgetown Child Development Center in collaboration with the National Institute of Development and Rehabilitation Research. In addition, two research and training centers were established: the Florida Research and Training Center for Children's Mental Health at the University of South Florida and the Research and Training Center on Family Support and Children's Mental Health at Portland State University (Knitzer, 1993; Roberts et al., 1990).

Subsequent to the creation of these support centers a paradigm shift in children's mental health occurred (Day & Roberts, 1991; Knitzer, 1993). One shift revisited the family, whereby the goal was dialogue between parents and the professionals who work with them (Day & Roberts, 1998; Freizen & Koroloff, 1990). Another shift included rethinking intensity in relation to services families received. Instead of looking at traditional residential placement for children, the focus became "wrapping services around" the child and family so that the child could stay in the community (Knitzer, 1993,

p.10.). In order to support this paradigm shift, there was a movement to build community-based and family-based systems of support for children, including a range of residential and nonresidential services to ensure agencies were linked (Burchard & Clarke, 1990; Stroul & Friedman, 1986; Stroul, Pires, Armstrong, & Meyers, 1998). Cross-system strategies were developed so that agencies would work together to provide a child's care (Knitzer, 1993; Stroul & Friedman, 1986). Enhancing cultural sensitivity also became a priority given the findings of the Children's Defense Fund study. Children in mental health systems were primarily white and those in the juvenile justice system were primarily minority (Knitzer, 1982). In order to reinforce this paradigm shift, an emphasis was placed on expanding knowledge through research, a trend supported by the Florida Research and Training Center for Children's Mental Health (Day & Roberts, 1991; Knitzer, 1993).

Although more is known now than ever before regarding mental illness, there is an ongoing need to educate one another because of the negative attitude and fear of mental illness that still pervades society (U.S. Department of Health and Human Services [USDHHS], 1999). In its report entitled *Mental Health: A Report of the Surgeon General*, the USDHSS (1999) suggested that approximately one in five children experience the signs and symptoms of *Diagnostic and Statistical Manual of Mental Disorders* diagnoses during the course of a year, with only 5% considered to experience extreme functional impairment. Although the report suggested that no one is immune to mental health disorders in childhood, there were specific risk factors cited that included caregiver separation, caregiver abuse or neglect, physical problems, intellectual disabilities, low birth weight, family history of mental illness and addiction, and multigenerational poverty. The report highlighted a range of efficacious psychosocial and pharmacological treatments that

exist, a great growth since early reports. Nonetheless, the USDHHS (1999) cited a need for research in true practice settings, as well as the need to overcome barriers to children receiving treatment. The USDHHS (1999) noted that primary care and schools are prime settings for identifying mental illness. Even so, professionals in schools were poorly trained, and the options for referral were limited. System approaches that involved the family and were culturally sensitive were found to be the most effective.

Most recently, the President's New Freedom Commission on Mental Health (2003) established six goals, many of which reflect the findings of the previous studies and are now the focus of today's child mental health care system. The first goal emphasizes the need for Americans to understand that mental health is essential to overall health. Second, mental healthcare needs to be consumer and family driven. Eliminating disparities in mental health treatment regardless of race or geographical location is the third goal. The fourth goal states that early intervention, health screening, and referral must be common practice. This goal calls for (a) the promotion of mental health in young children; (b) an expansion of school mental health; (c) and training for prevention, early intervention, and referral for all service providers. The fifth goal calls for ongoing research to ensure evidenced-based practice and excellent services. The sixth goal calls for tapping into today's increasing use of technology in healthcare to access services and information, particularly in rural areas.

### **School-Based Mental Health**

Due to the President's New Freedom Commission on Mental Health (2003) and the U.S. Department of Health and Human Services (1999) reports, along with subsequent federal initiatives, schools have been called to be involved in early identification and the

treatment of childhood mental illness (Knitzer, 1993; President's New Freedom Commission on Mental Health, 2003; USDHHS, 1999; Weist & Paternite, 2006). Although schools are not in the business of child mental health, they are mandated to educate children who may have mental illness (Adelman & Taylor, 1998). The need to educate children with mental illness has resulted in the school-based mental health movement which has grown significantly over the past two decades.

The growth of school-based mental health calls for educators to identify what the practice of school-based mental health includes. Literature published between 1985 and 1999 suggests that, although a strong group of school-based mental health programs impacts the outcomes of students with emotional disturbance, none target specific clinical syndromes. Instead these school-based mental health programs treat a variety of types of mental illness within one context (Rones & Hoagwood, 2000). Features identified as common across programs that make an impact on students with emotional disturbance include (a) consistent program implementation; (b) inclusion of parents, teachers, or peers; (c) use of multiple modalities; (d) integration of program content into the general classroom curriculum; and (e) developmentally appropriate program components (Rones & Hoagwood, 2000).

Consistent with the early school-based mental health literature, later findings of empirically supported mental health programs illustrated, in general, that programs were designed to be operated by or in conjunction with schools and parents (Kutash et al., 2006). These findings suggested that, as the school-based mental health movement continues to progress, a combined effort by teachers, parents, and mental health providers will be needed to create effective intervention. The paradigm shift that calls for new roles

for all those involved in treatment may not always be universally embraced or valued (Adelman & Taylor, 1998; Gable & Van Acker, 2000; Kutash et al., 2006; Weist et al., 2001). As the primary gatekeepers for mental health services, parents and professionals must look at an integrative framework to help communities and schools work together to implement effective intervention (Gable & Van Acker, 2000; Kutash et al., 2006).

The call for team members to assume new roles and to develop integrative frameworks has required a reexamination of school-based mental health structure and the challenges ahead. Weist and Paternite (2006) suggested that one such challenge is undoing the marginalization of school-based mental health. One factor impacting this marginalization has been the debate over why mental health services need to be in schools when a school's business is academics (Adelman & Taylor, 1998). Another identified challenge is the limited service delivery capacity in schools with an insufficient ability of providers to meet the needs of the students. The proposed solution is an integrative framework that requires a paradigm shift to system-wide efforts in schools involving all school professionals in early intervention and prevention (Adelman & Taylor, 1997; Greenberg et al., 2003; Weist & Paternite, 2006).

Childhood mental illness requires a reexamination of training across disciplines in order to ensure effective intervention. Deficits in training exist across school-based mental health team members, teachers, and community mental health staff (Adelman & Taylor, 1997; Koller & Bertel, 2006; Roness & Hoagwood, 2000; Weist & Paternite, 2006). Koller and Bertel (2006) stated:

School professionals often lack basic specific evidence-based knowledge and skills to identify and intervene with students at risk for mental illness, they also lack the

personal resources to understand their own mental health concerns which include how to effectively cope with job stress, while increasing teaching effectiveness and job satisfaction. (p. 197)

An examination of university-based curricula and certification requirements mandated by accrediting bodies revealed an inadequacy of specific competency-based pre-service training (Koller & Bertel, 2006). Accrediting bodies include the National Council for Accreditation of Teacher Education, the National Association of School Psychologists, and the Council on Social Work Education. A common theme in curricula across disciplines that include mental health training is a focus on pathology and deficits rather than prevention and early intervention (Koller & Bertel, 2006).

Future training of those individuals who work in the context of a school-based mental health movement requires consideration for all team players. It is necessary to revisit specific childhood mental health competencies mandated by accreditation agencies across all disciplines (Koller & Bertel, 2006; Rowling & Weist, 2004). Weist and Paternite (2006) highlight the need for training traditional school-based mental health workers to involve role redefinition. Pre-service and in-service training of mental health staff not employed by schools must teach them to function more collaboratively and effectively as a member of the school community. Paternite and Johnston (2005) suggest collaboration among classroom educators and school-based mental health professionals that should include mental health professionals spending substantial engagement and contact time with teachers in the classroom. Furthermore, Paternite and Johnston (2005) suggest a redefinition of the word educator to include all disciplines within the school. There is a need for true interdisciplinary training, where staff members from mental health



disciplines are trained together with educators, both before and during their professional service (Paternite & Johnston, 2005; Weist & Paternite, 2006; Weist et al., 2001). This training should focus primarily on a strength-based model emphasizing prevention instead of a traditional deficit-driven model (Koller & Bertel, 2006; Koller, Osterlind, Paris, & Weston, 2004; Paternite & Johnston, 2005).

In response to the school-based mental health movement and issues such as the adequacy of school personnel preparation, Morris (2002) developed an instrument to measure elementary school teachers' knowledge and attitudes about child mental health. No instruments existed to measure child mental health knowledge and attitudes. Those instruments that were available primarily focused on adult mental health. In addition to developing The Mental Health Teacher Opinion Inventory to measure teacher knowledge and attitudes, Morris identified whether there was a difference between pre-service and in-service elementary school teachers' knowledge about child mental health and child mental health attitudes. The subjects of the Morris study were elementary education majors (entry level and upper-class) attending Midwest universities and in-service general elementary school teachers in two Midwestern states. The instrument was administered to 254 individuals. The results of the study showed a statistically significant difference between pre-service and in-service groups based upon their level of preparation. However, there was not a significant difference between the two pre-service groups, which suggested that pre-service education may not significantly impact the mental health knowledge or modify attitudes about mental illness (Morris, 2002). In addition, while in-service teachers recognized the importance of having a basic understanding of children's mental health

issues, they were not satisfied with their ability to identify risk factors for mental illness or to link with community-based mental health services.

### **Occupational Therapists' Attitudes Toward Mental Health**

No occupational therapy studies examine the attitudes of school-based occupational therapists toward child mental health, even though studies exist regarding the attitudes of occupational therapy students toward individuals with mental illness. Specifically, the impact of classroom curriculum, instructor, and fieldwork on students' attitudes toward the mentally ill has been investigated.

There is similarity displayed on attitudes of students in healthcare professions and those of the general public toward individuals with mental illness as the general public (Fisher, 2002; Gilbert & Strong, 2000; Lyons & Ziviani, 1995). These findings raise concerns regarding how occupational therapists will interact with clients who have mental illness. In contrast to these findings, Lyons and Hayes (1993) challenged the hypothesis that occupational therapy students and the general public have similar attitudes toward mental illness. In their study, attitudes of occupational therapy students and business students toward individuals identified as having psychiatric disorders were compared using a social distance scale. A significant difference in attitudes was found between female freshman occupational therapy and business students' desire for social distance, with occupational therapy students desiring much less social distance. Although there was a difference in desire for social distance, business and occupational therapy students ranked preference for disability similarly. The least acceptable disability category was the mentally ill followed by those with a criminal record, alcoholism, mental retardation, cerebral palsy, and hunchback.

Questions regarding the impact of both classroom curriculum and fieldwork on the attitudes of occupational therapy students toward the mentally ill have prompted some investigation. Lyons and Hayes (1993) reported that there was no difference between freshman and senior occupational therapy students' desire for social distance from individuals with mental illness, suggesting that occupational therapy curriculum did not impact students' attitudes toward the mentally ill. In a later longitudinal study ( $n=36$ ) of occupational therapy students, a statistically significant increase in favorable attitudes of occupational therapy students toward the mentally ill was found following academic coursework (Penny, 2001). Interestingly, this study also showed that, although attitudes toward mental illness improved during academic course work, they continued to be significantly different than attitudes toward physical disabilities.

Gilbert and Strong (1997) identified a variety of factors that may influence the development of attitudes toward mental illness. These factors included anxiety, personal experience, attitudes toward psychiatry, and instructor attitudes. In their ex post facto study of occupational therapy students in their third and fourth years of study ( $n=62$ ), Gilbert and Strong (1997) found no statistically significant correlations between the identified factors (Gilbert & Strong, 1997). However, 37% of students who reported they were unaware that psychiatry was a part of the occupational therapy curriculum also reported high trait anxiety. These findings raise concern about the extent to which students examine curriculum before entering the field and the degree to which programs emphasize mental health content. Gilbert and Strong (1997) went on to suggest that students with high trait anxiety may miss course content secondary to their anxiety about the topic.

The influence of instructors on students' attitudes toward mental illness was studied in a random survey of 20 occupational therapy programs within the United States in order to determine if there was a significant difference between the attitudes of occupational therapy students and their instructors toward mental illness (Graessle, 1997). Both students and faculty were asked to complete an attitude rating scale (Opinions About Mental Illness [OMI]) and a demographic background questionnaire. The return rate for the study was 39%. A significant difference was found between student and instructor attitudes on the OMI for the following dimensions: (a) Authoritarianism, (b) Social Restrictiveness, and (c) Interpersonal Etiology. Authoritarianism refers to ideas of submission to authority and treating mentally ill individuals as inferior. The Social Restrictiveness dimension represents the view that the mentally ill are threats to society and the family unit, and the Interpersonal Ideology dimension refers to a more cognitive factor indicating that mental health is directly related to interpersonal experiences. These findings suggest that student attitudes toward the mentally ill may be influenced only to a limited extent by their instructors. Lyons and Ziviani (1995) also suggested that university instructors may inadvertently support negative attitudes toward the mentally ill through deficit and diagnosis teaching. Findings of their study indicated that educators need to present a more balanced view of individuals with mental illness.

Fieldwork has been identified as one of the most influential learning experiences students engage in during their education (Atwater & Davis, 1990; Bonello, 2001; Cohn & Crist, 1995; Crowe & Mackenzie, 2002; Hays, 1996). Studies looking at the impact of level II mental health fieldwork on attitudes toward mental health revealed mixed results. In their study of third-year occupational therapy students completing the mental health

semester, Gilbert and Strong (2000) administered the Community Attitudes Towards the Mentally Ill Questionnaire (CAMI; Taylor & Dear, 1981) at the beginning of the semester. Students were found to have a more positive attitude toward the mentally ill than Taylor and Dear's (1981) participants in their community sample even before completing mental health fieldwork. Following mental health fieldwork, the CAMI was administered again and a statistically significant improvement in students' attitudes was found toward the mentally ill. One weakness of this study is the fact that students' attitudes toward mental illness were not measured at admission to the occupational therapy program. Thus, it is not clear whether students developed their attitudes in the occupational therapy curriculum or came to the curriculum with these attitudes. Even so, mental health fieldwork was shown to move attitudes in an even more positive direction (Gilbert & Strong, 2000).

Lyons and Ziviani's (1995) phenomenological study found that anxiety, arising from societal preconceptions regarding persons labeled as mentally ill, appeared to have contributed to fear experienced by students entering level II fieldwork. Informants expressed anxiety about unpredictable behavior that might be displayed by people with mental illness. Several factors were believed to have influenced anxiety experienced by students. Popular films that portrayed stereotypes about mental illness were identified as contributing to anxiety about mental illness. Deficit-focused education that highlights all the problems of individuals with mental illness was thought to contribute to a pessimistic view of the client. Also, informants themselves believed they added to stereotypes that facilitated anxiety about mental illness by telling stories about what occurred during their fieldwork. Even though fear and anxiety toward mental illness were present at the onset of

fieldwork, these feelings diminished over time suggesting that mental health fieldwork changes attitudes (Lyons & Ziviani, 1995).

Penny (2001) studied the impact of level I and level II fieldwork on attitudes toward mental illness using two attitude instruments. Level II fieldwork resulted in a favorable change in attitude toward mental illness when measured by the Attitude Toward Disabled People Scale- Form A (ATDP-A; Yuker, Block, & Campbell, 1962); however, this was not a statistically significant change. The Opinions About Mental Illness Scale (OMI; Cohen & Struening, 1962) revealed a statistically significant change in attitudes toward mental illness, with attitudes becoming more positive on two scale factors following level II fieldwork (Penny, 2001). Graessle (1997) also used the OMI to compare the attitudes of students toward mental illness and found no significant difference in attitudes between students who completed mental health fieldwork and those who did not, suggesting that fieldwork experiences did not impact attitudes toward the mentally ill.

Penny's (2001) study of level I mental health fieldwork found that students' attitudes toward mental illness did not significantly improve when measured by the ATDP-A (Yuker, Block, & Campbell, 1962). In fact, attitudes were found to be more negative when measured by the OMI (Cohen & Struening, 1963). In a later study, Beltran, Scanlan, Hancock, and Lockett (2007) found positive attitudes toward mental illness increased following level I mental health fieldwork. In this instance, level I fieldwork was accompanied by a tutorial component that consisted of weekly full-day classes that included practical skills and a guided process of reflection on experiences. Pre-fieldwork student statements reflecting attitude toward mental illness included the following themes: "(a) people with mental illness as different, (b) fear of people with mental illness, and

(c) deficit focus of mental illness” (Beltran et al., 2007, p. 42). Post-fieldwork student statements reflecting attitude toward mental illness included the following themes: “(a) the ‘ordinariness’ of people with mental illness, (b) students’ understanding of people with mental illness, and (c) an enabling approach to people with mental illness” (Beltran et al., 2007, p. 42). These post-fieldwork themes suggested an attitude shift as a result of fieldwork with tutorials and guided reflection.

The studies of occupational therapists’ attitudes toward the mentally ill produced mixed results about the impact of experience on occupational therapy student attitudes. Even though the results were mixed, they provided evidence that academic curriculum and fieldwork experience may, indeed, be factors that influence today’s school-based therapists’ knowledge and attitudes toward child mental health.

### **Occupational Therapists’ Mental Health Knowledge**

No studies directly measured occupational therapists’ knowledge of child mental health, but two studies were found that measured perceived competency of mental health occupational therapists. Although school-based therapists suggest they do not have psychosocial knowledge (Barnes et al., 2003; Case-Smith & Archer, 2008), studies addressing perceived competency of occupational therapists working in mental health settings found that therapists did indeed have adequate psychosocial knowledge (Cottrell, 1990; Greaves, King, Yellowless, Spence, & Lloyd, 2002). When asked to rate performance ability on 21 professional mental health tasks, 80% of respondents rated their ability to perform 15 of 21 tasks as good or excellent (Cottrell, 1990). Items with poor ratings included (a) providing occupational therapy input on a patient’s level of functioning according to Axis V or DSM-III-R, (b) conducting a quality review of the

program, (c) providing occupational therapy input regarding functional effects of psychotropic medications, (d) using occupational therapy frames of reference in practice, and (e) supervising occupational therapy or non-occupational therapy staff. In addition, a relationship between education level and the ability to use frames of reference in practice and to provide input regarding medication effects on function was found (Cottrell, 1990). Individuals with post-professional masters degrees had higher mean scores than those with entry-level master's degrees, suggesting that level of education has an impact on perceived competency.

Similarly, Greaves et al. (2002) studied perceived competency of occupational therapists in mental health practice compared to nursing, social work, social work associates, psychology, and psychiatry. Respondents completed the Mental Health Workers Core Competencies Scale (MHWCCS) which asked individuals to rate their own competence on 27 items, such as knowledge of mental illness and clinical interventions, legal and ethical issues, and case management services. Results of the study found that occupational therapists practicing in mental health received scores on the MHWCCS that were comparable to other professionals suggesting occupational therapists feel competent in mental health practice. Interestingly, although there was not a significant effect for work location, when the community setting sample was examined separately occupational therapists had the highest self-perceived competence in mental health practice of any discipline. When looking specifically at occupational therapists, those working in community settings had higher self-perceived competence in mental health practice than those working in extended inpatient and acute inpatient settings. Greaves et al. (2002) reported length of experience was found to be a highly significant covariate ( $F = 83.3$ ,



$df = 1, p < 0.01$ ) on level of competence in mental health practice. Given the findings, Greaves et al. (2002) learned that basic and continuing education of occupational therapists provided them with knowledge, skills, and attitudes needed to perceive themselves as competent in contrast to other studies that suggest academic preparation is not sufficient (Barnes et al., 2003; Case-Smith & Archer, 2008; Craik & Austin, 2000).

Studies of perceived competence and self-efficacy of occupational therapists working in community mental health showed that occupational therapists do have knowledge and competence, which raises questions regarding whether the same finding would be present in school-based occupational therapists. An investigation may reveal that they are lacking knowledge and perceived competency in child mental health which could be the result of a focus on adult-based mental health curriculum content.

#### **School-Based Occupational Therapists' Perceptions Toward Mental Health**

Although no studies were found that directly measure the child mental health knowledge and attitudes of school-based occupational therapists, four specific articles were located that give insight into the perceptions of school-based occupational therapists toward children with emotional disturbance: (a) "Perceptions Regarding School-Based Occupational therapy for Children with Emotional Disturbance" (Barnes et al., 2003), (b) "The Dilemma of Psychosocial Occupational Therapy in Public Schools: The Therapists' Perceptions" (Beck, Barnes, Vogel, & Grice, 2006), (c) "School-Based Services for Students with Emotional Disturbance: Findings and Recommendations" (Case-Smith & Archer, 2008), (d) "Meeting the Psychosocial Needs of the Students in Special Education: An Ethnographic Study" (McDuff, Schultz, Andersson, & Pemberton, 2009). These studies give an understanding of the current status of practice

and issues school-based occupational therapists face in relation to serving children with emotional disturbance.

A review of current school-based occupational therapy practice revealed that only 10.9% of students on occupational therapy caseloads are identified as having emotional disturbance, with the majority of those cases being children K-5 (Barnes et al., 2003). Also, it was found that students with emotional disturbance were only referred for occupational therapy if they had concurrent attention, sensory, or motor issues (Case-Smith & Archer, 2008). Fine-motor dexterity continues to be the most frequently addressed performance skill in school-based therapy (Barnes et al., 2003). Psychosocial performance skills were identified as being addressed, however much less often than fine-motor skills. Psychosocial performance skills included attention span, self-control, organizational skills, managing transitions, interpersonal skills, social conduct, increasing behavioral control, and reducing inappropriate behaviors (Barnes et al., 2003; Case-Smith & Archer, 2008). In McDuff et al.'s (2009) ethnographic study involving nine school-based occupational therapists interviewed via phone, therapists reported they do not always consider the psychosocial performance skills of children with physical or cognitive disability. The lack of a holistic approach to occupational therapy was one reason cited for addressing psychosocial performance skills less often.

Current occupational therapy treatment approaches with children who have emotional disturbance included school work tasks, environmental modification, play skills, social skills, visual motor skills, visual perception, and arts and crafts (Barnes et al., 2003). Treatment theories being used to guide intervention included sensory integration, behavioral modification-acquisitional approaches, Alert Program, and social-skills training

programs (Barnes et al., 2003; Case-Smith & Archer, 2008). McDuff et al. (2009) found four of the nine participants indicated they did not use a particular theory or method when addressing psychosocial performance factors, which suggests a lack of understanding in applying both occupational therapy models and models from psychology in school-based practice.

When asked, 86.4% of occupational therapists felt it was appropriate for them to work with children who have emotional disturbance. Those occupational therapists who reported it was not okay to work with children who have emotional disturbance indicated that occupational therapists were not adequately trained to work with this population or that emotional disturbance alone does not warrant occupational therapy (Barnes et al., 2003). Findings of Case-Smith and Archer (2008) revealed that two-thirds of respondents believed they were not well prepared by their academic training, and the Barnes et al. (2003) study reported that only 17.3% felt adequately prepared, 6.1% felt well prepared, and 3.7% felt exceptionally prepared. Furthermore, McDuff et al. (2009) reported that therapists had “learned more from ‘experience,’ ‘common sense,’ or ‘life in general’” (p. 213). These findings suggest that child mental health curriculum is, overall, not adequate and is not consistent across academic programs. Occupational therapists indicated a need for continuing education to improve intervention for children who have emotional disturbance (Barnes et al., 2003; McDuff et al., 2009). Barnes et al. (2003) found occupational therapists wanted (a) training in sensory integration and modulation, (b) attention deficit hyperactivity disorder (ADHD), (c) autism, and (d) behavioral management and handling techniques. More specifically, respondents to the McDuff et al. (2009) study wanted (a) measures to identify psychosocial needs, (b) psychosocial

techniques such as how to look at a child's day or how to use role-playing, and (c) methods for communicating with other professionals about working with children who have psychosocial performance skill deficits.

Because school-based occupational therapists are reporting a low incidence of intervention with children who have emotional disturbance, an understanding of current barriers is necessary to inform the study. In addition to the already identified barrier of therapists not feeling adequately trained, Case-Smith and Archer (2008) found that 41 respondents felt that the disruptive behavior itself was an obstacle to occupational therapy even though the primary goal for these children is to improve the behavior. This obstacle suggests that respondents may not recognize that the behavior itself should be the focus of the intervention. Occupational therapists reportedly perceived that children with emotional disturbance need more sustained intervention time and that they lack in motivation. Children who have emotional disturbance were also perceived as potentially violent, leading therapists to fear a child may physically attack someone (Beck, Barnes, Vogel, & Grice, 2006).

In a qualitative study, Beck et al. (2006) identified role confusion as a barrier. Role confusion was identified as consisting of (a) boundary issues between professions, (b) occupational therapists' difficulty in articulating their role, (c) occupational therapists' narrow scope of practice in school settings, and (d) inability to expand occupational therapy boundaries. A limited identification and provision of occupational therapy services was also identified as an obstacle. Factors surrounding this issue primarily related to turf issues and a lack of understanding about occupational therapy by school personnel. The McDuff et al. (2009) study asked occupational therapists to define the role of

occupational therapy in meeting a student's psychosocial needs. Responses varied and included ideas such as (a) assist students with social skills in the school environment, (b) make modifications for the student, and (c) consult with teachers. Although the described role of the therapist varied, all participants agreed that "the role of the therapist was to develop the child's ability to function successfully as a student" (p. 212).

In addition to the already discussed barriers, Beck et al. (2006) and Case-Smith and Archer (2008) identified additional barriers to providing occupational therapy services to children who have emotional disturbance. System-wide administrative issues including time, caseloads, space, and a lack of support from administration, were also identified as a hindrance. Classroom factors that served as barriers included poor carryover of strategies into daily routine and difficulty implementing occupational therapy strategies in the classroom. Parental factors were also cited as a barrier because of difficulty communicating with parents, a lack of therapy carryover at home, and a lack of support for the student program.

### **Occupational Therapy Practice With Children Who Have Emotional Disturbance**

Although AOTA (2009a) identified the psychosocial needs of children and youth as an emerging practice area, there has been a growing concern over the past 20 years that occupational therapy left its psychosocial practice roots at the door in pediatric practice. Florey (1989) first raised this issue when calling into question whether child psychiatry is a specialized area or an entry-level practice area for occupational therapists. She suggested that it must be an entry-level practice skill since occupational therapy's foundation of knowledge is built upon looking at the whole person. Florey's (1989) literature review found that no occupational therapists called themselves child psychiatry occupational

therapists and that the social and emotional development of children was left out of practice. Some in the profession raised the concern that one primary cause of the profession's lack of involvement with children who have emotional disturbance is its acceptance of a limited role in schools (Cahill, 2006; Donica, 2009; Hahn, 2000). Not only have other professionals in schools suggested that mental health is not really occupational therapy's domain, but occupational therapist themselves accept this limited role (Cahill, 2006). Occupational therapy is reorganizing itself and identifying just what its role with students who have emotional disturbance will be in the future. Given that the movement to intervene with children who have emotional disturbance is being driven by AOTA, a review of the association's position and description of intervention is appropriate.

### **American Occupational Therapy Association Official Documents**

Four documents are relevant to describing the current definition of occupational therapy practice in this area. In AOTA's (2004) statement on "Psychosocial Aspects of Occupational Therapy," psychosocial was defined as "intrapersonal, interpersonal, and social experiences and interactions that influence occupational behavior and development" (p. 669). This document highlights the importance of the profession's holistic nature of serving all individuals' psychosocial needs regardless of practice area. Several case vignettes are presented, describing a variety of practice areas and application of psychosocial intervention in clients' care. Examples in the document include children with feeding problems and psychosocial issues, children with developmental disorders struggling to follow routines, and teenagers in trouble with the law.

AOTA's (2008a) document "Mental Health in Children and Youth: The Benefit and Role of Occupational Therapy" describes occupational therapy services as those that assist children to participate in meaningful roles (friend, student, or family member) and activities. The focus of intervention is on increasing meaningful engagement in activity by addressing social, emotional, and cognitive skills. In addition, the paper describes the use of sensory integration and environmental influence on behavior. Occupational therapy evaluation takes place through addressing skills, roles, habits, interests, social-emotional issues, sensory integration, cognitive factors, and contextual influences on behavior. Interventions include playground skill groups, social-emotional learning activities, social stories, and friendship skills. AOTA (2008b) also authored "FAQ on School Mental Health for School-Based Occupational Therapy Practitioners." This document outlines a definition of school-based mental health, including Koller and Bertel's (2006) public health model of service delivery, and how occupational therapy intervenes at each tier of the model. Intervention approaches, including sensory processing, social learning theory, positive behavior support, and social-emotional learning, are also discussed along with specific evaluation and intervention examples.

*Occupational Therapy Practice Guidelines for Children with Behavioral and Psychosocial Needs* (Jackson & Arbesman, 2005) defines the role of occupational therapy in working with children who have psychosocial needs. Jackson and Arbesman (2005) highlight intervention examples at the individual-level, institution-level, and community-level. The most important component of this document is the review of evidenced-based practice literature. The literature is divided into interventions for at-risk children and youth, interventions for children with learning disabilities and mental retardation, and

interventions for children and youth with diagnosed mental disorders. Of this literature, only two studies came specifically from occupational therapy, and two additional studies incorporated occupational therapy, indicating a lack of evidenced-based practice in the field of occupational therapy. Jackson and Arbesman (2005) showed that, although there was a lack of occupational-therapy driven literature, researchers in other disciplines valued the activity-based interventions.

A review of these critical documents published by the AOTA supports the claim that pediatric occupational therapists struggle to incorporate their psychosocial roots in practice. These documents focus on providing case vignettes, definitions, intervention approaches, and service delivery models, all aimed at assisting occupational therapists trying to return to holistic-based occupational therapy practice. Furthermore, these documents highlight the challenges of role definition and lack of evidenced-based practice faced by occupational therapists as they intervene with children who have emotional disturbance.

### **Community-Based Intervention**

During a recent review of community-based intervention literature, play emerged as an intervention strategy used by occupational therapists. At one time, pediatric mental health focused on the use of play as a tool for developing skills in a child. Play is now used as a primary means of intervention to assist a child in adapting socially (Dennis & Rebeiro, 2000). Using play as the primary occupation for intervention, Cahill (2007) proposed applying the Model of Human Occupation (Kielhofner, 2002) to facilitate playfulness. The Model of Human Occupation (Kielhofner, 2002) offers a variety of assessments to evaluate the process of play and to gain an understanding of the child's



interests and sense of self-efficacy. Assessments include the Short Child Occupational Profile (Bowyer, Ross, Schwartz, & Kielhofner, 2004), the Pediatric Volitional Questionnaire (Basu, Kafkes, Geist, & Kielhofner, 2002), and the Child Occupational Self Assessment (Keller, Kafkes, Basu, Federico, & Kielhofner, 2002). When using the Model of Human Occupation (Kielhofner, 2002) play is described as a means through which children can practice self-regulation and coping skills. Visual supports such as schedules and the use of timers aid therapists in moving children through the transitions involved in play (Cahill, 2007).

After-school programs are a common setting where all children engage in play, whether organized or free. Structured play has been used effectively as the main occupation in after-school programs. More specifically, after-school programs targeting at-risk youth and children on the autism spectrum have been found to be an effective means of improving social-emotional behavior (Bazyk & Bazyk, 2009; Marr, Cullen, Hugentober, & Hunger, 2008). Bazyk and Bazyk (2009) studied at risk youth participating in a 9-week program based upon structured occupation and social-emotional learning. Groups consisted of introduction, participation in structured leisure activity, and closure which included discussion about social-emotional concepts. Bazyk and Bazyk (2009) found that the children described the group aspect as fun because of engagement in novel and challenging occupations within a group. The children also reported that being able to talk about feelings and learn strategies to deal with anger was valuable. Structured play in after school programs was found to improve not only the child's ability to handle emotions, but also the child's ability to engage socially (Marr et al., 2008). Using a small, single-subject, pretest-posttest pilot study of children with autism spectrum disorders, Marr

et al. studied the impact of a seven week structured social skills program. Though this was only a pilot study, the findings are noteworthy in that children displayed improvement in both conversational skills and nonverbal communication. Both of these studies support the use of occupational therapy groups in after-school programming.

Finding appropriate play settings in the community can be difficult for families who have children with behavioral disorders. Using a mixed-methods design, Fette and Estes (2009) studied the needs of families with children who have behavioral disorders to determine how families participate in their community. Families indicated that they engaged in parallel activities, such as eating out or going to the mall, but asked specifically for more information about programs that would accommodate their child's sensory or psychosocial differences. Barriers to their involvement in the community were found to include a lack of trained staff, stigma, financial and time constraints, and a lack of mental health supports.

Although play is often the focus of intervention, the field of occupational therapy also supports the use of true occupation, such as play, as an assessment tool. Quake-Rapp, Miller, Ananthan, and Chiu (2008) used play to identify the frequency of maladaptive behavior in youth with severe emotional and behavioral disorders. Children were observed in their natural occupations such as creative art, bowling, and field trips while the researchers monitored for the most frequent behaviors. Observers were trained to observe for off-task behavior, anger- physical aggression, anxiety-withdrawal, motor tension-excess, noncompliance, verbal abuse violent episodes, and sexually inappropriate behavior. Inter-rater reliability ranged from marginal to high. Quake-Rapp et al. (2008) determined

that observing children in true occupation and documenting behaviors that may interfere with successful engagement in play was an effective means of assessment.

### **School-Based Intervention**

A review of school-based intervention literature revealed three themes: (a) studies to support occupational therapy intervention for children with emotional disturbance, (b) proposed conceptual models for practice, and (c) the application of sensory integration frame of reference. Studies that supported these themes and their implications will be discussed.

Sometimes school-based teams do not accept occupational therapists as qualified to intervene with children who have emotional disorders. Durette and Kolak (2004) conducted a needs assessment that addressed the appropriateness of occupational therapy intervention for at-risk youth attending alternative education programs. Staff at three alternative education schools were surveyed (83% return rate) to identify deficit areas they saw in their students. Deficit areas included poor time management skills, decreased healthy participation in hobbies and leisure activities, a lack of healthy lifestyle behaviors, and cognitive deficits (Durette & Kolak, 2004). All of these deficit areas are included in the profession's domain. Although the findings of Durette and Kolak (2004) supported the use of occupational therapy services in alternative schools, there is little evidence that this is occurring. Milliken, Goodman, Bazyk, and Flinn (2007) conducted a needs assessment that looked specifically at the incidence of grief issues on school-based therapy caseloads and whether or not school-based occupational therapists intervened on this issue. A survey was distributed to 150 school-based therapists in Ohio with 56 therapists responding. Therapists referenced 403 opportunities to address grief in the context of their current

caseload. Grief issues were reported as major moves, debilitating injuries to self, and divorce. Sixty-four percent of the respondents indicated that they addressed grief in the context of therapy. Most often, they reported use of discussion and promotion of self-expression as the means to address grief. Milliken et al.'s (2007) study contradicted the findings of other surveys (Barnes et al., 2003; Case-Smith & Archer, 2008) that have suggested therapists reported they do not feel adequate in addressing psychosocial issues of children.

Because school-based occupational therapists have reported difficulty using psychosocial skills in practice, it was not surprising that a variety of occupational therapy-specific conceptual models, as well as models from other fields, have been proposed to assist therapists in treating children with emotional disturbance. Schkade and Schultz (1992) developed the Occupational Adaptation Model which treats children in natural settings, allowing students to develop their own adaptations. Occupational therapy with children in natural settings has been shown to improve social and behavioral skills (Schultz, 2003). The Occupational Adaptation Model allows students to participate in student roles that they are, at times, denied because of behavioral issues. The therapist's role is to (a) establish the natural environment; (b) identify therapeutic opportunity; (c) assess the student's adaptation gestalt; and, (d) engage in exploratory processes with the student (Schultz, 2003). The Model of Human Occupation (Keilhofner, 2002) has also been utilized to conceptualize treatment for a child who witnessed domestic violence. Nave et al. (2001) used the Occupational Therapy Psychosocial Assessment of Learning (OT PAL) to develop an intervention plan for a child who experienced domestic violence. The OT PAL is an assessment that is used to evaluate the psychosocial functioning of a

child in his/her classroom. Through classroom observation and parent, teacher, and child interviews, Nave et al. (2001) determined supports that would assist the child in his natural environment, the classroom. Recommendations for supports included offering choices, participating in social skills group, and expanding roles the child could be successful at in school.

In addition to occupational therapy-derived models and the public health model of service delivery (Koller & Bertel, 2006), Chandler (2007) proposed using an organizational framework for occupational therapy based upon Tschannen-Moran and Hoy's (2001) research on teacher efficacy. Chandler's (2007) framework called for intervention with children who have emotional disturbance to be focused on (a) supporting instructional strategies, (b) fostering classroom management, and (c) supporting student engagement. Using Tschannen-Moran and Hoy's model (2001), occupational therapists approach intervention by addressing how to best support the roles of the teacher and the student.

The Sensory Integration Frame of Reference (Ayres, 1972) has been helpful with children who have disruptive behavioral disorders, severe emotional disturbance, and the autism spectrum disorders (Barnes, Schoenfeld, Garza, Johnson, & Tobias, 2005; Case-Smith & Miller, 1999; Mulligan, 2001; Pfeiffer, Henry, Miller, & Witherell, 2008; Salls & Bucey 2003; Schilling, Washington, Billingsley, & Deitz, 2003). Articles on the topic of using sensory strategies in school mental health practice were the most prevalent. This finding is consistent with the Barnes et al. (2003) and Case-Smith and Archer (2008) studies, which reported the most likely reason occupational therapists would be asked to

intervene on a school mental health team was for sensory integration issues. In order to better illustrate the nature of these interventions, a summary of the literature is provided.

One frequently addressed topic in the literature was the utilization of seating devices and weighted products as sensory-based strategies used to assist children with attention difficulties. In particular, seating devices have been found to be an effective method of improving attention span. Schilling et al. (2003) investigated the effects of therapy balls on in-seat behavior and legible word productivity of students with ADHD. A single-subject, A-B-A-B interrupted time series design was used across three students in a fourth-grade, inclusive classroom. Results indicated an increase of appropriate in-seat behavior and legible word productivity for the three students. Pfeiffer et al. (2008) studied the impact of a "Disco 'O' Sit" cushion on attention to task in second-grade students with attention difficulties. Subjects included 63 children who were assigned to either the treatment group or the control group. Students in the treatment group used the cushions for a two-week time period and teachers completed the Behavior Rating Inventory of Executive Functioning (Gioia, Isquith, Guy, & Kenworthy, 1996) for each student before and after the intervention. A one-way analysis of variance was used to analyze the data. A statistically significant difference was found between the control and treatment group on the Global Executive Composite ( $F [1, 59] = 28.31, p < .05$ ), the Behavioral Regulation Index ( $F [1, 59] = 17.52, p < .05$ ), and the Metacognition Index ( $F [1, 59] = 9.976, p < .05$ ) suggesting that "Disco 'O' Sit" cushions increased student's attention to task.

Weighted vests are commonly used in the treatment of children with developmental disabilities (Olson & Moulton, 2004b) and have also been found to be effective in improving on task behaviors in children with emotional difficulties. Olson and Moulton

(2004a) found that therapists most frequently used vests in cases of autism spectrum disorders, ADHD, and sensory integration disorders. Vandenberg (2001) investigated the effects of weighted vests on children with ADHD during fine motor activities. A convenience sample of four children with ADHD receiving school-based occupational therapy services was used in Vandenberg's (2001) study. Students wore weighted vests at 5% of their body weight for 20- to 30-minute periods during intervention. Using a single-system, AB design, two observers monitored off-task behaviors with and without vests. Students' on-task behaviors improved by 18% to 25% for all four students, lending support to the use of weighted vests for children with ADHD.

Occupational therapists use the theory of sensory integration most often when working with children who have emotional disturbance, yet they face barriers when using these strategies in the classroom (Barnes et al., 2003; Case-Smith & Archer, 2008). Mulligan (2001) evaluated the practice of teachers with children who have ADHD by surveying 625 general education teachers at 13 randomly selected school districts in northern New England. The return rate was only 27%. The most frequent strategies used by teachers when working with children who have ADHD were preferential seating, frequent contact, and enforcing routine and structure. Sensory modulation strategies were seen as least frequently used. Teachers were also asked to rate the strategies for effectiveness. The most effective strategies were routine and structure, frequent contact, preferential seating, motor breaks, and self-monitoring. Mulligan (2001) found that occupational therapists need to further educate teachers regarding sensory modulation strategies as a possibility for addressing off-task behaviors in the classroom.

Williams and Shellenberger's (1994) Alert Program for Self-Regulation was designed to assist students with attention problems by using sensory strategies for self-regulation in the classroom (Barnes et al., 2003, 2005; Case-Smith & Archer, 2008; Maas, Mason, & Candler, 2008; Salls & Bucey, 2003). To date, even though practice literature suggests that the Alert Program is being used extensively, there are few published studies supporting it. Barnes et al. (2005) investigated the use of the Alert Program in a self-contained classroom serving children with emotional disturbance. Three boys 9 to 10 years of age were selected to participate and were taught the Alert Program 3 days per week for 30-minute individual sessions for 7 weeks. Although the primary emphasis was on instrument feasibility, it was noted that students did show some behavioral improvement. One student showed improvement on a behavioral rating scale, and two students showed improvement on the classroom behavior checklist instrument. Barnes et al. (2005) indicated that teachers were not instructed on prompting students to use strategies in the classroom; therefore, it was recommended that future studies include a longer period of time and inclusion of an entire classroom.

The Alert Program was also studied when used in combination with cognitive behavioral therapy in teaching children to self-regulate (Maas et al., 2008). Maas et al.'s (2008) intervention involved an occupational therapist, social worker, and teachers serving a fourth-grade inclusion classroom for children with autism spectrum disorders. The program took place over 15 weeks. During the last 3 weeks, teachers were asked to indicate how often children used strategies that they were taught in the program. Teachers reported that students used the strategies 75% of the time when behavior was an issue. Teachers also suggested that it was easier to redirect students when they were angry as the



program provided a vocabulary and strategies to use with the student. Maas et al.'s (2008) study revealed not only that students achieved success, but also that teachers found success in working with students who have emotional disturbance. The Maas et al. (2008) study also followed the true interdisciplinary intervention model proposed by school-based mental health leaders as necessary for effective intervention (Koller & Bertel, 2006; Weist & Paternite, 2006).

Children with pervasive developmental disorders are served by occupational therapists in both the community and the schools. In order to understand current school-based practice with this population, Case-Smith and Miller (1999) surveyed 500 ( $n= 292$ ) therapists belonging to the Sensory Integration and School System Special Interest Section of AOTA. Therapists were asked to identify difficulties that children with pervasive developmental disorders display. Therapists reported frequent difficulty in sensory modulation, tactile function, and vestibular function. Socioemotional problems, such as lack of eye contact, poor interactions with peers, and poor play skills were also noted as significant difficulties. Services were most often direct in nature. Sensory integration and environmental modification approaches were used most frequently.

### **Occupational Therapy Education**

Professional education for occupational therapy has evolved over the years from originally granting a baccalaureate of science in occupational therapy to adding an associate of science degree; master's degree; and, most recently, the doctoral degree in occupational therapy (ACOTE, 2009). All occupational therapy education levels encompass both academic and fieldwork education components (AOTA, 2007b). Occupational therapy education instills in its students "the belief that humans are complex beings engaged in a dynamic process of interaction with the physical, social, temporal,

cultural, psychological, spiritual, and virtual environments” (AOTA, 2007d, p. 678). In addition to university-based education, the profession of occupational therapy identifies the importance and significance of continuing education (AOTA, 2005a, 2005b, 2005c).

It has been proposed that it is the responsibility of occupational therapy educators to monitor emerging knowledge and technologies in the field of occupational therapy (AOTA, 2007d). It is the role of the educator to consistently reinforce the development of new knowledge to be reflected in the curriculum in order to ensure well-prepared therapists for the future. Occupational-therapy educators rely on current literature, feedback from practicing therapists, societal trends, and the AOTA for emerging knowledge important to the field of occupational therapy.

In 2003, AOTA established its centennial vision as a road map to its 100<sup>th</sup> anniversary (AOTA, 2009a). As a part of this vision, leaders in the field called for revisiting occupational therapy curriculum in order to ensure the future of occupational therapy. The *Occupational Therapy Model Curriculum* (AOTA, 2009b) outlined a process of developing the curriculum, suggesting that programs consider key threads (themes informed by mission and vision) and content that should be included in a curriculum; however, this text does not identify specific required threads or content. Instead, best practice in curriculum development is defined as monitoring AOTA’s vision for the future and reflecting both established practice areas and emerging areas of practice in development of the curriculum (AOTA, 2009b). Practice areas identified by AOTA and of interest to this dissertation are mental health and children and youth. Of the named emerging practice areas, psychosocial needs of children and youth are of specific interest to this dissertation (AOTA, 2009a).

In addition to AOTA's work on developing a model curriculum, the association has suggested a "Blueprint for Entry-Level Education" (AOTA, 2010a). This document outlined course content to include four factors that should be reflected in education: (a) person-centered factors, (b) environmental factors, (c) occupation factors, and (d) professional and interpersonal factors. For each factor, specific topics, threshold concepts, science, skills, areas of practice, and level of practice area are addressed. Suggested curriculum content reflective of occupational therapy with children and youth who have emotional problems would include concepts such as motivation, self-efficacy, affect, mood, self-concept, identity, emotion regulation, coping, and well-being. Skills necessary to address these factors included assessment, intervention planning, group skills, activity analysis, self-management strategies, and therapeutic use of self. In addition, the course content covered issues related to the social and cultural environment that impact function.

Although the proposed curriculum content outlined (AOTA, 2010a) included addressing psychosocial issues of children and youth, addressing psychosocial issues of all ages has been a longstanding tradition and component of occupational therapy education (AOTA, 2007a; Jackson & Arbesman, 2005). Occupational therapy believes that psychosocial dimensions of human performance are fundamental to all areas of occupational therapy practice, not just in traditional mental health treatment (AOTA, 2004). Therapeutic relationships, interviewing skills, interpersonal and group dynamics, and therapeutic group design and facilitation have been longstanding features of occupational therapy education (AOTA, 2004).

Currently, there are no published studies regarding child mental health content in occupational therapy curriculums. However, as mentioned previously, therapists themselves are reporting that they do not feel their academic training prepared them to work with children who have emotional disturbance (Barnes et al., 2003; Beck et al., 2006; Case-Smith & Archer, 2008). As mentioned previously, Beck et al. (2006) asked therapists to list any obstacles for providing occupational therapy service to children with emotional disturbances; several themes emerged, one of which was a perceived lack of training. Specifically,

there was no training in school or internships regarding this population; decreased emphasis on psych in our training and fieldwork, lack of specific coursework in school, not enough background in school or continuing education addressing behavior issues outside of sensory issues, no continuing education. (p. 7)

Interestingly, occupational therapists also reported that school personnel are also unfamiliar with emotional disturbance. Although occupational therapists indicated a perceived lack of knowledge, there was also evidence in these three studies that occupational therapists may perceive a lack of knowledge due to acceptance of a limited role and other political factors among the school-based team.

The impact of classroom coursework and fieldwork on the attitudes of occupational therapy students toward those with mental illness was discussed previously under the heading of Occupational Therapy Perception of Mental Health, but it is also necessary to understand the degree to which fieldwork placements may impact the future practice of occupational therapists. Fieldwork experiences are an important influence on occupational therapy practice pursued by clinicians after graduation (Craig & Austin, 2000; Crowe &

Mackenzie, 2002; Ezersky, Havazelet, Hiller-Scott, & Zetler, 1989). The impact of mental health fieldwork on willingness to practice in mental health is particularly relevant to this study because the study seeks to understand if completing mental health fieldwork impacts psychosocial knowledge or attitudes. Also, the study seeks to understand if the integration of psychosocial knowledge into a non-mental health fieldwork impacts the psychosocial knowledge and attitudes of school-based occupational therapists toward children with emotional disturbance.

At the present time, ACOTE accreditation standards (AOTA, 2007a) require the completion of a minimum of 24 weeks in fieldwork settings, divided among a minimum of two practice areas. A mental health fieldwork placement is not required, but a new standard (B.10.15) requires evidence of including psychosocial factors in all settings (AOTA, 2007a). Atwater and Davis (1990) studied the value of psychosocial fieldwork by surveying 152 occupational therapists who graduated from Colorado State University. Students graduating from Colorado State University were required to complete a 12-week mental health fieldwork. Only a small number (8.6%) of graduates were currently practicing in mental health, with the largest percentage (56.8%) practicing in hospital, rehabilitation, or school settings. Interestingly, 97.4% of the largest group reported that they dealt with psychological issues as a part of their practice. When asked if completing level II mental health fieldwork provided training and experiences that were valuable to their practice today, 85.3% viewed it as valuable. Of those who did not feel it was valuable, 35% cited a poor site selection. Experiences that were most valuable during mental health fieldwork included: (a) learning to deal with emotions of self and others was rated as the most valuable (75.9%); (b) 57.8% felt that leading groups was valuable; and

(c) 44% valued applying psychosocial theory. When asked to comment about whether they felt mental health fieldwork should be required, respondents suggested that not requiring level II mental health fieldwork threatens the holistic approach to traditional occupational therapy. However, others indicated that they felt selection of more specialized areas for fieldwork was favored (Atwater & Davis, 1990).

In addition to the impact of mental health fieldwork on future practice, it is important to understand the impact of the entire pre-registration mental health content, which includes both classroom and fieldwork experiences. Craik and Austin (2000) surveyed 200 members of the Association of Occupational Therapists in Mental Health regarding their preparation for mental health practice (Craik & Austin, 2000). Of those who responded, 37% indicated education had been sufficient; 44% considered it as partly sufficient; and 19% reported it was insufficient. These findings were then examined in relation to variables of age, time worked in mental health, and their grade; however, no statistical significance was established. In addition, Craik and Austin (2000) surveyed 30 directors of undergraduate occupational therapy education courses in the United Kingdom receiving a response rate of 70%. Respondents were asked, "Thinking of the future, what do you think are the three most important issues facing occupational therapists working in mental health?" (p. 337). Primary issues included: (a) focusing on community and primary care, (b) defining specific skills and the role of occupational therapy as distinct from other professions, (c) preparing undergraduates for the unique approach of occupational therapy, evidenced-based practice, (d) stronger professional identify to support working in a multidisciplinary team, and (e) focus on activity and occupation. The educators also highlighted the lack of fieldwork placements and good role models for students, which is

consistent with other research on the topic (Atwater & Davis, 1990; Lyons & Ziviani, 1995). The lack of fieldwork placements and role models for students further compounds the difficulties the profession is having with returning to holistic-based occupational therapy.

Another important key to informing curriculum is understanding the challenges newly practicing mental-health occupational therapists experience. Lloyd, King, and Ryan (2007) interviewed 15 therapists who were within the first two years of practice in order to understand challenges they faced. Three key domains were identified: (a) skills and knowledge, (b) preparation for practice, and (c) achieving competence. In the area of skills and knowledge needed to practice, therapists identified discipline-specific skills including selecting and interpreting occupational therapy assessments, clinical reasoning to develop interventions, knowledge of occupational therapy's role in mental health, and utilizing discipline-specific skills in a generic or case management role. Generic skills included understanding of counseling and psychoeducation, knowledge of mental illnesses and medications, case management skills, mental health legislation, and generic assessments (risk assessment or mental state). On the second domain, preparation for practice, therapists identified that practice placement in mental health was key to their preparation. Therapists indicated that they needed to further develop knowledge of the occupational therapy role, interventions based on occupational therapy frameworks, client management and boundary setting, confidence and assertiveness, medication and diagnosis knowledge, selecting and interpreting occupational therapy assessments, legislation, and organizational skills. The third domain, achieving competence, revealed two main categories regarding the methods graduates used to develop skills needed to work in mental health. The first

category was personal coping strategies which involved using mentors and networking, debriefing with colleagues, research, and learning from mistakes. The second category was the influence of the work place in terms of the importance of team cohesion, workplace policies, and performance appraisal and development plans.

Lloyd et al. (2007) studied occupational therapists practicing in mental health to understand the difficulties they experience in practice. In particular, therapists reported struggling to implement the occupational therapy framework, a similar struggle experienced by school-based therapists (Chandler, 2007; Nave et al., 2001; Schultz, 2003). Lloyd et al. concluded that therapists in mental health practice, like school-based therapists, struggled with role identification (Beck et al., 2006; Case-Smith & Archer, 2008). These findings supported the theme that occupational therapists are experiencing difficulty in using psychosocial knowledge across practice contexts, even in mental health contexts themselves.



### CHAPTER III. METHODS

This mixed-methods study examined the child psychosocial knowledge and attitudes of occupational therapists practicing in school-based settings. The study also examined the experience of school-based occupational therapists in developing their knowledge and attitudes regarding children who have emotional disturbance. A triangulation, mixed-methods design was used in which different, but complementary, data were collected on the same topic (Creswell & Plano Clark, 2007; Gay et al., 2006). Specifically, the triangulation convergence model was used which collects and analyzes quantitative and qualitative data separately and then results were converged in interpretation. A survey instrument measuring the general child mental health knowledge and attitudes of school-based occupational therapists was used to gain an understanding about their current level of knowledge and attitudes. In addition, this instrument assessed potential relationships between the level of knowledge and attitudes and level of education, mental health fieldwork, academic course content, and continuing education experiences of school-based occupational therapists. Concurrent with the survey, a qualitative phenomenology method was used in order to understand the occupational therapists' experience in developing child psychosocial knowledge and attitudes. Both quantitative and qualitative data were brought together to strengthen the study. Although understanding the level of psychosocial knowledge and attitudes informed the current status of practicing school-based occupational therapists, it did not show how they developed knowledge and attitudes, which is also important in affecting both academic and continuing education for school-based occupational therapists. Permission was secured

from the Institutional Review Board at North Dakota State University prior to the start of the study (Appendix A).

Qualitative methods were used to answer the following broad research question: What meaning do school-based occupational therapists give to their experience in developing child mental health knowledge and attitudes? Subquestions included: (a) What experiences influenced the development of child psychosocial knowledge and attitudes for school-based occupational therapists? (b) How have different contexts (academic, fieldwork, and practice) influenced the development of psychosocial knowledge and attitudes for school-based occupational therapists? (c) What are the key constituents that influence the development of child psychosocial knowledge and attitudes for school-based occupational therapists?

Quantitative methods were used to answer the following research questions: (a) What level of general child psychosocial knowledge do school-based occupational therapists currently possess? (b) What are the attitudes of school-based occupational therapists toward children with emotional disturbance? (c) How does the level of general child psychosocial knowledge and attitudes of school-based occupational therapists compare to teachers' general child psychosocial knowledge and attitudes? (d) Is there a difference in knowledge and attitudes based upon level of preparation (bachelors, masters, or doctoral)? (e) Is there a relationship between the level of general knowledge or attitudes and the level of specific child mental health course content in therapists' academic curriculum? (f) Is there a difference in knowledge and attitudes between therapists who completed mental health fieldwork and those who did not? (g) Is there a relationship between the level of general knowledge or attitudes and the incorporation of psychosocial

knowledge into non-mental health fieldwork? (h) Is there a relationship between general knowledge or attitudes and continuing education courses specific to mental health since graduating? (i) Is there a relationship between general knowledge or attitudes, and practice experiences with children who have emotional disturbance?

### **Mixed-Methods Research Design**

Mixed-methods research is used when quantitative and qualitative approaches combine to provide a better understanding of a research problem than using one approach alone (Creswell & Plano Clark, 2007). Gay et al. (2006) stated, "the purpose of mixed methods research is to build on the synergy and strength that exists between quantitative and qualitative research methods in order to understand a phenomenon more fully" (p. 490). Specifically, the convergence model of triangulation design was used in this study. This design included one phase where both quantitative and qualitative data were collected at the same time about the same phenomena; both types of data had equal weight (Creswell & Plano Clark, 2007). Triangulation designs gather different, yet complementary, data on the same subject (Morse, 1991). The convergence model involved the collection and analysis of quantitative and qualitative data separately; then, the results were converged during interpretation by comparing and contrasting them (Creswell, 2005; Creswell & Plano Clark, 2007).

Although the triangulation design offers much strength, such as the ability to efficiently gather two complementary sets of data that can be analyzed separately, it also presents challenges (Creswell & Plano Clark, 2007). One challenge was determining if the sample for each method would be from the same group. For this study, the individuals surveyed and interviewed were from the same group, practicing school-based occupational

therapists, but the samples for the qualitative and quantitative methods were drawn separately. Morse (1991) suggested that it would be inappropriate to use the same sample because qualitative and quantitative methods require different sampling approaches. A second challenge associated with triangulation designs is comparing data from two different sample sizes. It is important to note that, if sample sizes are not equal, the comparison of the data sets can be limited (Creswell & Plano Clark, 2007). Finally, the separate data sets might provide contradictory results which make interpretation difficult. Creswell and Plano Clark (2007) suggested collecting additional data, if feasible, to resolve the contradictory results. Morse (1991) suggested that interpretation is done within the context of present knowledge:

As such, each component should fit like pieces of a puzzle. This type of interpretation is not accomplished using mathematical formula to weigh the findings from each method; rather, it is an informed thought process involving judgment, wisdom, creativity, and insight and includes the privilege of creating or modifying theory. (p. 122)

This study concurrently collected data using an instrument measuring child mental health knowledge and attitudes, as well as using phenomenological interviews to understand the development of child mental health knowledge and attitudes in school-based occupational therapists. Data were collected and analyzed separately and combined in the interpretation. Appendix B shows a visual diagram of the procedures for the study. Given the nature of the convergence design, data collection and analysis for the quantitative and qualitative methods were presented separately, and were brought together by comparison and contrast in Chapter 5.

### Qualitative Data Collection

Hammell (2001) suggested that qualitative research methods are compatible with the profession of occupational therapy because qualitative designs are focused on the participant, which is consistent with the values of client-centered occupational therapy practice. In this research study, the occupational therapist was student, practitioner, and fieldwork educator in the process of developing holistic, occupation-based practice that utilized psychosocial knowledge and was the topic under study.

Creswell (2007) noted that qualitative designs are suited for understanding complex issues that require talking directly with the individuals who are engaged in the issue or problem. This study employed phenomenology. Phenomenology is the study of individuals' experience from their own perspective (Finlay, 1999; Giorgi & Giorgi, 2008). Phenomenology is used more in health-related disciplines because of the link between phenomenology and the humanistic values of healthcare professionals (Finlay, 1999; Creswell, 2007). Occupational therapy studies employing phenomenology investigated the experience of children in after-school groups (Bazyk & Bayzk, 2009), the use of therapeutic strategies in self-care (Guidetti & Tham, 2002), and the concept of holism (Finlay, 2001). For the purpose of this study, the central phenomenon under study was the experience of school-based occupational therapists in developing child psychosocial knowledge and attitudes.

Phenomenology is based upon the work of Husserl in the late 19th century (Finlay, 1999; Giorgi & Giorgi, 2008). The purpose of phenomenology is to reduce individual experiences to a universal essence (Creswell, 2007). It is discovery oriented, seeking to describe versus determining causal explanations (Finlay, 1999). Phenomenology is

concerned with consciousness, “consciousness is to be understood not as limited to awareness, but in a much broader sense which would also include preconscious and unconscious processes” (Giorgi & Giorgi, 2008, p. 26). Phenomenology is a method used to study individuals who have firsthand experiences with the phenomenon of interest to capture the way the phenomenon is experienced as closely as possible (Giorgi & Giorgi, 2008). “Phenomenological studies tend to have a fairly narrow focus, and provide description that is deep, richly exploratory, and less amenable to abstraction” (Zimmer, 2006, p. 314). Phenomenology often relies on retrospective descriptions since it is concerned with how persons actually lived through and interpreted situations (Giorgi & Giorgi, 2008).

Although there have been several interpretations of Husserl’s original work, Finlay (1999) and Giorgio and Giorgi (2008) suggested several principles of phenomenological inquiry. Phenomenology is focused on the life world or *Lebenswelt*, which is defined as “the world of experience as it is lived” (Finlay, 1999, p. 301). It is committed to description of the human experience versus explaining how and why. The concept of intentionality is key to phenomenology. Finlay (1999) described intentionality by stating, “the life world is not an ‘objective’ environment or a ‘subjective’ consciousness or set of beliefs; rather, the world is what we perceive and experience it to be” (p. 302). In other words, there are multiple realities. Giorgi and Giorgi (2008) further stated: “phenomenologists insist that it is the objective itself that is grasped by consciousness, not some representation of it” (p. 33). The challenge to the researchers then is to provide “careful description” (Giorgi & Giorgi, 2008, p. 33) of the individual’s experience under study. This is thought to be a difficult task to deal with given the likelihood of preexisting

biases. Essential features of phenomenology used to combat biases are the concepts of *Epoche* and phenomenological reduction (Finlay, 1999). Giorgi and Giorgi (2008) suggested that *Epoche* or bracketing is a method for engaging in an attitudinal shift. The researcher brackets, or sets aside knowledge or previous experiences about the topic being studied in order to keep an open mind. Phenomenological "reduction requires an attitude whereby one considers everything that is given to consciousness from the perspective of consciousness as such" (Giorgi & Giorgi, 2008, p.33).

In phenomenology, the researcher must retain a non-judgmental attitude, accepting what is reported, and that the subjects are reporting what they know to be their experience (Finlay, 1999). Finlay (1999) suggested that researchers must acknowledge their own experiences and knowledge and impact it may have on interpretation. "Our understandings are being continually modified as we move back and forth looking at the whole and parts in a dialectic between preunderstandings, interpretation, sources of information, and what is being revealed" (Finlay, 1999, p. 302). One way to examine subjective and intersubjective influences on research is called the process of reflexivity (Finlay, 2002). Engaging in reflexivity is a strategy to improve integrity and trustworthiness of the research. Finlay (2008) suggested that the process of reflexivity is necessary to establish the phenomenological attitude. Engaging in bracketing and phenomenological reduction is one method of employing reflexivity. Additional strategies for reflexivity will be discussed in the next section.

### **Role of the Researcher**

Creswell (2007) defined the researcher as the "key instrument." Rather than relying on instruments to collect the data, the researcher is the data collector and analyzer

in qualitative research. Because the researcher is the primary data collector and analyzer, it is important for the researcher to consider reflexivity during the research process (Corbin & Strauss, 2008; Finlay, 2008). Creswell defined reflexivity as “self-awareness” (p. 11). Finlay (2002) suggested that, by using reflexivity, researchers can turn subjectivity into an opportunity instead of a problem. Finlay (2008) discussed the use of bracketing and phenomenological reduction in order to engage in reflexivity. Although Finlay (2002) acknowledged the somewhat ambiguous nature of reflexivity, she also provided the following recommendations for researchers to consider when engaging in reflexivity:

- (a) examine the impact of the position, perspective, and presence of the researcher,
- (b) promote rich insight through examining personal responses and interpersonal dynamics,
- (c) empower others by opening up a more radical consciousness,
- (d) evaluate the research process, method, and outcomes,
- (e) enable public scrutiny of the integrity of the research through offering a methodological log of research decisions. (p. 532)

The researcher performing this study currently practices in a psychosocial, community-based practice with children and adolescents; serves as a fieldwork educator; and teaches a course focused on the psychosocial issues of children, adolescents, and young adults. Although this researcher is actively involved in transitioning students from a hospital-based community day program back to their home schools, the researcher is not a traditional school-based occupational therapist and, therefore, enters the research with only a basic understanding of occupational therapy in a school-based practice. Practicing in a hospital-based mental-health occupational therapy practice and instructing in content related to the mental health practice allows for an understanding of what form and type of



psychosocial knowledge are needed and how this knowledge is used in the mental-health pediatric practice context. It is acknowledged that this therapist's experience in traditional mental health practice and as an educator could have impacted the research because it may have resulted in school-based therapists feeling guarded or uncomfortable sharing their experience in developing knowledge and attitudes about children with emotional disturbance for fear of being judged. To make the participant comfortable, the researcher set a non-judgmental tone and, at the outset of the research, defined a desire to understand how they have developed psychosocial knowledge. Again, the role of the researcher was to empower those who have engaged in the process to describe their experience.

As the research process moved forward, this researcher kept a journal reflecting on personal insights gained during the process as well as reactions to the process and interviews themselves. The researcher took account of why decisions were made to interview certain individuals or to follow up with additional questions to gain an understanding about the phenomena of interest. Evaluation of the research process took place through journaling and discussions with the main adviser of the project. Decisions were documented, and background information for those decisions was provided.

### **Unit of Analysis**

The main unit of qualitative analysis was individual school-based therapist interviewees. Study participants were occupational therapists currently practicing school-based occupational therapy. With consent from the participants, interviews were taped and transcribed.

## Study Participants

Qualitative research utilizes purposeful sampling because the researcher is looking for people who can inform an understanding of the research problem (Creswell, 2007). When selecting individuals for phenomenological studies, it is important that they have all experienced the phenomena being explored, such as the development of psychosocial knowledge and attitudes, and can articulate that experience.

This study commenced with homogenous sampling. Homogenous sampling is concerned with selecting participants who are similar in experience (Gay et al., 2006). In this study, the homogenous sample included school-based occupational therapy practitioners who were practicing in the United States and who attended the American Occupational Therapy Association Annual Conference and Expo in Orlando, Florida, April 29-May 2, 2010. Prior to attending conference, the researcher interviewed one participant as a pilot interview and these data were included in the data analysis. Ultimately, the method of sampling reflected a snowballing procedure which involved identifying people who know people who would be rich with data (Creswell, 2007). Creswell (2007) suggested that phenomenology studies vary from 5 to 25 participants. This researcher sought to complete 9-12 interviews at the American Occupational Therapy Association Annual Conference and Expo and completed 10. The total number of interviews for data analysis was 11, with ten interviews occurring at the American Occupational Therapy Association Annual Conference, and Expo and one occurring in North Dakota as a pilot interview. In order to find individual therapists for interviews from across the nation, three AOTA Special Interest Section Chairs from the Early Intervention and School System Special Interest Section, the Mental Health Special Interest Section, and the Sensory

Integration Special Interest Section were contacted and asked for names of possible subjects (Appendix C). A posting on the AOTA Connections Forums website was used to request interviews. The three Special Interest Section Chairs did not nominate individuals for interviews directly, but instead, forwarded the request for interviews to individuals they knew. The posting on the AOTA Connections Forums resulted in scheduling seven interviews prior to arrival at conference. Some participants responded directly to the researcher. Other participants were suggested by those participants who responded directly to the researcher. Once at conference, the researcher attended the Early Intervention and School System Special Interest Section meeting and requested additional interviews at that time.

All participants were occupational therapists working in school-based practice. Of the 11 school-based occupational therapists interviewed, 3 were from Texas, 2 were from Virginia, and the remaining therapists included one each from New Jersey, New York, California, North Carolina, Connecticut, and North Dakota. All participants were female (according to AOTA (2010b) the ratio of females to males in occupational therapy is approximately 11:1) ranging in age from 32-57 years with a median age of 47 years and an average age of 45.3 years. Participants had been practicing between 8-30 years for a total of 185 years of practice among participants. Four had manager positions, 1 owned a private practice, and the remaining 6 were staff therapists. Educational backgrounds ranged from bachelors' degrees to doctoral degrees. See Table 1 for further description of characteristics of study participants.

Table 1. Participant Characteristics

| Subject | Age | Yrs in Practice | Position                | Mental Health Practice | Mental Health Fieldwork    | Level of Education      |
|---------|-----|-----------------|-------------------------|------------------------|----------------------------|-------------------------|
| P1      | 34  | 11              | Staff Therapist         | Yes                    | Level I Child              | MS, education           |
| P2      | 47  | 26              | Staff Therapist         | Yes                    | Level I,II Adult           | MS, health sciences, OT |
| P3      | 32  | 10              | Manager/Staff Therapist | No                     | Level II Adolescent        | MS, OT                  |
| P4      | 49  | 30              | Manager                 | Yes                    | Level II Adult             | Ph.D. Candidate, OT     |
| P5      | 57  | 29              | Manager/Staff Therapist | No                     | Level II Adult, Adolescent | Ph.D, OT.               |
| P6      | 39  | 13              | Manager                 | No                     | Level II Adult             | MOT                     |
| P7      | 46  | 15              | Staff Therapist         | No                     | Level II Adult             | OTD                     |
| P8      | 48  | 21              | Staff Therapist         | No                     | Level II Adult             | BS                      |
| P9      | 47  | 12              | Owner, Private Practice | No                     | Level II Adult             | MS, OT                  |
| P10     | 42  | 10              | Staff Therapist         | No                     | Level I Adolescent         | MS, OT                  |
| P11     | 57  | 8               | Staff Therapist         | No                     | Level II Adult             | MS, OT                  |

### Data Collection

Phenomenological designs most commonly use interviewing as the primary method for data gathering (Creswell, 2007; Giorgi & Giorgi, 2008). In this study, face-to-face interviews began with a pilot interview in North Dakota at the researcher's office. Face-to-face interviews continued at the American Occupational Therapy Association Annual Conference April 29-May 2, 2010, in Orlando, FL.

Creswell (2007) suggests the use of an interview protocol containing approximately five open-ended questions. The interview protocol included the research question outline and demographic data about the subject (Appendix D). Rubin and Rubin (2005) suggest using responsive interviewing which allows the researcher to listen and respond to what one learns from the subject instead of sticking to predetermined questions.

Phenomenology calls for broad questions focused on describing experience, such as "please describe for me a situation in which you failed to learn" (Giorgi & Giorgi, 2008, p. 29). Rubin and Rubin (2005) call for consideration of main questions, probes, and

follow-up questions in preparing for the interview. Following Rubin and Rubin (2005) and Giorgi and Giorgi (2008), the broader statements of (a) "tell me about experiences you have had in working with children who have emotional disturbance" and (b) "tell me about your experiences in developing child mental health knowledge" were asked of all participants. Following these broad questions, participants were allowed to tell what was important to them and the researcher engaged in follow-up and probing questions. Creswell (2007) recommends a pilot interview or a review of the questions be completed prior to the start of the study which was completed. This assisted the researcher in refining interviewing from a phenomenological perspective.

Interviews with participants were 45-75 minutes in length. Participants were asked to select a location that was comfortable for them. All participants selected to meet in the lobby of the convention center or at the hotel. Interviews were taped and transcribed following consent from the participant (Appendix E). At the outset of the study, a transcriptionist was hired to transcribe the interviews; however, the transcriptionist was unable to complete the transcription in a reasonable amount of time. The transcriptionist completed five of the interviews and the researcher transcribed the remaining six. To ensure accuracy of the transcription, the researcher replayed all audio recordings to compare audio recordings to transcribed data. Along with audio recording, the researcher jotted field notes as the interviews progressed. The researcher also completed personal reflections following the interview. Transcribed interviews were returned to the subjects for their review. Once the digital files were transcribed, they were destroyed. All information was kept under lock and key at the researcher's home prior to analysis.

## **Participant Portraits**

The following eleven subject portraits are based on face-to-face interviews. The names of the participants have been replaced by participant (P) and a number to maintain the confidentiality of the interview content.

At age 34, P1 has practiced in occupational therapy for 11 years. During her occupational therapy career she has practiced in adult mental health, geriatrics, outpatient and acute physical disabilities, and the last three years in school-based practice. Her school-based practice includes consultations, direct service, and in-service education to teachers. She sees children on the Autism spectrum, children with physical disabilities, and children with fine motor disabilities. She is rarely asked to see children who have an Individualized Education Plan (IEP) under the category of emotional disturbance unless it is for a sensory diet consult. P1 did not complete a mental health Level II fieldwork because it was not a requirement, however, she did complete a Level I mental health fieldwork. At the time of the interview, she was completing her master's degree in education.

P2 is 47 years of age and has practiced for 26 years. Nineteen of those years were in Great Britain where she worked in adult mental health. The past six years she has worked in pediatrics. Her case load consists of "pretty much everything." Examples given were attention deficit hyperactivity disorder, Down syndrome, physical disabilities, and children referred through Response to Intervention. She completed a Level II mental health fieldwork as a part of her academic training. P2 has two masters' degrees- one obtained in Britain in health sciences and the second a post-professional masters degree in occupational therapy obtained here in the United States.

At 32 years of age, P3 has practiced for ten years. For her entire career, she has been employed by a contracting company who provides services in school-based practice. P3 is a district supervisor for occupational and physical therapists and provides direct services to children first grade and older. Common diagnoses she sees include autism, attention deficit hyperactivity disorder, learning disabilities, cerebral palsy, and Down syndrome. P3 completed a mental health fieldwork with children and adolescents in a community program. These children and adolescents primarily had substance abuse issues and a history of physical or sexual abuse. P3 has a post-professional masters' degree in occupational therapy.

P4 is 49 years of age and has practiced for 30 years in a variety of areas including adult physical disabilities, adult and child psychiatric settings, and school-based practice where she is currently a manager. Her school-based practice included 15 years of direct care. The majority of her current practice is overseeing occupational and physical therapists, however she stated that she still has cases; "I get the complicated ones." P4 completed an adult mental health fieldwork. She currently has a master's degree, but is pursuing a doctoral degree.

P5 is 57 and has practiced in occupational therapy for 29 years. Her practice experiences include adult home health, pediatric home health, 0-3 community programming, and school-based practice. Currently, she provides direct and consult services for children with a variety of needs including those with severely handicapping conditions, fine motor difficulties, sensory disorders, sensory motor issues, and behavioral issues. She also engages in supervisory responsibilities. She completed mental health

fieldwork at a facility that served both adults and adolescents. P5's highest academic degree is a research doctorate.

P6 has practiced for 13 years and is 39 years of age. She practiced briefly in hand therapy and acute care while working six years of direct service in school-based practice. She currently is a supervisor of occupational and physical therapists in school-based practice. During her direct practice in schools, she saw children with physical disabilities, orthopedic issues, stroke, seizure, dyspraxia, learning disabilities, autism, and Down syndrome. She completed an adult mental health fieldwork. Her highest degree is a masters of occupational therapy.

P7 is 46 years of age and has practiced in occupational therapy for 15 years. She is fairly new to school-based practice as her first 11 years were in hospital, rehab, and skilled nursing facilities. She sees kindergarten to age 22 at her current job. She primarily sees children for handwriting difficulties, attention problems, fine motor issues, and organization issues. She sees the children in general education settings, in the autism classes, and other special education classes. She recently received her occupational therapy doctorate with an emphasis in pediatrics and indicated that her reason for pursuing the degree was spurred by her transition from adult physical disabilities to school-based practice. She stated, "I started a whole new career because it is so different". She completed a Level II adult mental health fieldwork.

At 48 years of age, P8 has practiced for 21 years. Her school-based practice serves children ages 3-21 with a variety of diagnoses such as neurodevelopmental, developmental delay, and autism. She indicated that the primary reason for referral to occupational therapy has been handwriting even though the district has educated teachers in the district



on all services occupational therapy can offer. Prior to school-based practice she worked in a residential adult center for people with mental retardation, home health, and long-term care. She completed a Level II adult mental health fieldwork. Her highest degree is a bachelors in occupational therapy.

P9 is 47 years of age and has been practicing in occupational therapy for 12 years, all of which have been in pediatric practice. She worked in schools in the past, but now owns her own private practice. As a part of her practice, she sees children to support their IEP; however, this may occur at the clinic. She also consults with teachers, completes classroom visits, and participates in IEP meetings. In addition, she serves as a coordinator of services for a school district and oversees five other therapists. She teaches for a local university. P9 completed a Level II mental health fieldwork as a part of her occupational therapy education. She has a post professional masters degree in occupational therapy.

P10 is 42 years old and has practiced in occupational therapy for 10 years, all in school-based practice. She described her practice as both direct service with children and supervising occupational therapy assistants. She sees children, primarily kindergarten through 5<sup>th</sup> grade, who are referred for handwriting problems, sensory processing difficulties, fine motor concerns, and autism. She completed a Level I mental health fieldwork. Her highest degree is a master's degree in occupational therapy.

P11 is 57 years of age. She has practiced in occupational therapy for eight years, first practicing in adult rehabilitation, then public schools, and now a private school that serves children with learning disabilities. She also serves children with high functioning autism or Asperger's disorder. Children are referred to her primarily for fine motor issues, sensory concerns, organizational problems, psychosocial issues, or social skills deficits.

She completed a Level II mental health fieldwork during her academic training. She holds a masters degree in occupational therapy.

### **Phenomenological Design**

This study used Giorgi and Giorgi's (2008) method for data analysis based on the work of Husserl. Phenomenological analysis calls for the researcher to "get within the attitude of scientific phenomenological reduction, and be mindful of the phenomenon being studied" (Giorgi & Giorgi, 2008, p. 34). Finlay (2008) suggests that the "phenomenological attitude involves a radical transformation in our approach when we strive to suspend presuppositions and go beyond the natural attitude of taken for granted understanding" (p. 3). Several steps were taken to suspend potential beliefs or knowledge that might impact analysis. First, the researcher set aside the qualitative subquestions during analysis in order to keep an open mind to the meaning participants gave to their experience. Second, quantitative data collected at the time of qualitative analysis was placed under lock and key in a safe to ensure that quantitative data would not influence the analysis of qualitative data. Third, the researcher engaged in reflexivity, as described earlier in this chapter, by examining the impact of the researcher's experience during interviews and analysis procedures. "Bracketing" or *Epoche* through journaling and speaking with the main advisor and an occupational therapy colleague were used to maintain a non-judgmental attitude.

In addition, using Giorgi and Giogi's (2008) grid format for analysis facilitated setting aside bias (Appendix F). Following each interview, the researcher reflected on what was heard and formed thoughts about the experience of school-based occupational therapists based upon spoken word. Once the data analysis of written word began, it

became clear that some of the initial thoughts of the researcher were inaccurate. The grid format enabled the tracing of key constituents in a transparent manner so that the initial thoughts of the researcher were not present at the end of the analysis. Once the researcher assumed the phenomenological attitude, the analysis began. The following steps were applied to complete the analysis process.

1. *Gaining a global sense of the description.* The first step in the process was to gain a sense of the whole. This was done by reading one transcribed participant interview in order to gain a sense of the whole. This process was then repeated for each of the transcribed participant interviews until the entire data set had been reviewed.

2. *Identifying meaning units.* The second step involved taking each individual interview and breaking the data into "meaning units". While completing a more thorough reading of each individual interview, the researcher placed a slash in the text each time a transition of meaning took place. Because meaning units are associated with the attitude of the researcher, there are no objective meaning units (Giorgi & Giorgi, 2008). Giorgi and Giorgi (2008) state: "The making of meaning units is a practical step that will help in the achievement of the subsequent step. Ultimately what matters is how the meaning units are transformed, not their size or their comparison with those of other researchers" (p. 35). The end result of this step was many meaning units for each individual interview still in the language of the participants. Each individual interview's meaning units were transferred into column 1 of the grid format illustrated by Giorgi and Giorgi (2008) (Appendix F). The end result of this step was 11 individual grid formats containing the meaning units for each participant's interview, yet still in the language of the participants. An excerpt from one interview analysis is provided in Appendix G. Although it is

acknowledged that the reader will not gain full understanding with only the excerpt of one full analysis, it was necessary to fulfill the obligation to the participants to keep full data sets confidential. Providing the entire data set meant the reader would have access to a full interview broken into meaning units, which was not deemed appropriate. What will be gleaned is the effort the researcher took to be transparent in the analysis process. These processes were shared with the main advisor and an occupational therapy colleague.

3. *Transformation of the meaning units.* The third step of analysis transformed implicit meaning to explicit meaning with respect to psychological meaning (Giorgi & Giorgi, 2008). In addition, this step generalizes so that the analysis was not situation-specific. Finally, this step allowed for a description of what took place (Giorgi & Giorgi, 2008). The number of transformations completed was dependent upon what is necessary to understand the meaning of the experience. Again, this step was completed using Giorgi and Giorgi's (2008) grid format (Appendix F, G). The meaning units were transformed using two columns. The first column was used for the initial transformation and the second column was available for synthesis and further highlighting of the psychological dimension, if necessary. The end product for step 3 was the completion of columns 2 and 3 on each individual interview's grid format (Appendix F, G). Once the transformation process was completed, the final synthesis column was reviewed and an individual interview summary for each participant was written. This method allowed for transparency of the data analysis process and allowed for ease in tracing the general structure back to rich descriptions provided by the participants.

4. *Developing the general structure of the experience.* In the final step of the process, "the structure is gained by going over the last transformations of meaning units

and attempts to determine what constituents are typically essential in order to account for the concrete experiences reported” (Giorgi & Giorg, 2008, p. 46). Giorgi and Giorgi (2008) indicate the goal is to transform what is implicit to explicit, especially with respect to psychological meaning. This step allowed for revealing the meaning that is lived but not clearly articulated. This step was completed by reviewing the final transformations represented in the individual interview summaries to determine the general structure and key constituents that supported the general structure of the experience. The researcher then verified the general structure by returning to the transformed meaning units to see that all were at least implicitly included (Giorgi & Giorgi, 2008). In order to elaborate on the findings, the researcher then dialogued with the meaning units and raw data to illustrate the findings of the study in more detail.

### **Validity and Reliability**

Validity in qualitative research is often referred to as credibility (Creswell, 2007). Creswell (2007) suggests several validation strategies that assist the researcher in producing valid and credible work. First, prolonged engagement and persistent observation were essential. It was important to develop trust with the participants, learning their culture, and checking for misinformation. Second, triangulation of the data were made through multiple interviews, methods, and investigators. Triangulation was achieved in this study through multiple interviews of school-based occupational therapists across the United States. Third, peer debriefing or peer review served as an external check of the research process. Both the main adviser and an occupational therapy colleague were used for peer review and debriefing throughout the research process.

The fourth issue, clarifying researcher bias from the outset of the study, allowed for the reader to understand any bias and assumptions that may impact the study. Researcher bias was addressed through a list of assumptions in Chapter 1 as well as through the process of reflexivity as defined by Finlay (2002) and discussed earlier. Creswell's (2007) fifth recommendation was member checking. Member checking occurred when the study findings were at a point that they could be distributed to the participants for their review and feedback. Finally, to address transferability of the findings, Creswell (2007) recommends using thick and rich description to report the study findings, which was discussed at length by Geertz (1973).

Polkinghorne (1989) further suggests that validation in phenomenology means the idea is well grounded and supported. Polkinghorne (1989) suggests that the researcher address five issues related to validity. First, be sure the researcher has not influenced the participants' descriptions. Second, be sure transcription is accurate. Third, when the data are reviewed by a peer reviewer, are there other conclusions that could be made, and if so, does the researcher identify these possibilities? Fourth, be sure that it is possible to go from a general structural description to the transcription to account for connections. Finally, is the structural description specific to the situation?

Reliability, often referred to as dependability in qualitative research, can be addressed through a variety of ways (Creswell, 2007). This researcher addressed reliability first through quality audio recording of the interviews along with allowing the participant to review the transcribed interview for opportunity to correct or elaborate on something in the interview.

## **Quantitative Data Collection**

### **Sample Population**

The target population for the quantitative portion of the study was school-based occupational therapists who were members of the Early Intervention and School System Special Interest Section of the American Occupational Therapy Association. Specifically, members from this group who selected “school” as their primary work environment composed the population that was sampled. The population size as of July 23, 2009, was 1,715 (C. Foster, personal communication, AOTA, July 23, 2009). The researcher sought to gather a nationwide sample of all certified occupational therapists through the National Certification Board of Occupational Therapy (NBCOT); however, NBCOT reported that it currently does not make certification lists available for research studies (NBCOT, personal communication, December 14, 2009). Occupational therapy literature was reviewed for possible sample methods. The majority of studies used AOTA member samples, suggesting that this researcher’s method was consistent with occupational therapy research practice. Participants were assured of their confidentiality in completing the study instrument.

### **Sampling Procedures**

It is noted that AOTA does not provide email addresses for soliciting participants for studies. Use of the AOTA Early Intervention and School System Special Interest Section forum was considered, but limitations were encountered. First, only 307 Early Intervention and School System Special Interest Section members are currently registered in the AOTA Early Intervention and School System Special Interest Section forum and this would have limited the number of responses (C. Foster, personal communication, AOTA,

December 7, 2009). Second, AOTA allows only a posting of 2-3 sentences and a link to the study to seek participants for a survey or instrument (C. Foster, personal communication, AOTA, December 2, 2009). The literature was consulted for previous samples of the AOTA Early Intervention and School System Section and rates of return for mail surveys. Please note that in 2008, the School System Special Interest Section's name was changed to Early Intervention and School System Special Interest Section, so the examples drawn from the literature represent the name School System Special Interest Section. Barnes et al. (2003) surveyed 982 therapists with a return of 476. Case-Smith and Archer (2008) surveyed 1,000 members and had a return of 555.

Members of the AOTA Early Intervention and School System Special Interest Section who selected "school" as their primary work environment composed the population the sample was drawn from. At the time of sampling, the total population was 1,715 occupational therapists. A random sample, allowing each individual in the population to have an equal chance of selection, was drawn from this population (Gay et al., 2006). To determine sample size, the following resources were consulted. Gay et al. (2006) suggested that, for a population size of 1,800, at least 317 should be sampled; however, they indicated that this is a relatively simple method of determining sample size. Fowler (2002) suggested that, by using random sampling (50/50 chance of being selected) and a 95% confidence interval, the sample size would need to be 500, which results in a sampling error of 4%. Based upon these criteria and previous return rates for this population, 1,000 members were randomly selected from the Early Intervention and School System Special Interested Section and contacted via mail.



Based upon the total number of occupational therapists who were sent the survey, ( $N = 1,000$ ), a 63% response rate was achieved ( $N = 630$ ). The majority of the respondents were female ( $n = 604$ ). The majority of the sample was Whites ( $n = 596, 94.6\%$ ). The remaining respondents were relatively evenly distributed across Blacks ( $n = 5, .8\%$ ), Asian Indians ( $n = 3, .5\%$ ), Chinese ( $n = 5, .8\%$ ), Filipinos ( $n = 1, .2\%$ ), Japanese ( $n = 7, 1.1\%$ ), Vietnamese ( $n = 1, .2\%$ ), Native Americans ( $n = 2, .3\%$ ), and Others ( $n = 9, 1.4\%$ ). A masters degree was reported as the highest level of education ( $n = 327, 51.9\%$ ) followed by bachelors degree ( $n = 289, 45.9\%$ ), and doctoral degree ( $n = 14, 2.2\%$ ). Years in practice ranged from 3-54, with the average years in practice being 25.79 ( $SD = 9.8$ ). Table 2 reports the frequencies and percentages associated with age. The most frequently occurring age range was 51-60 years.

Table 2. Frequencies and Percentages of Age Categories

| Age Category | Frequency | Percentage |
|--------------|-----------|------------|
| 22-30        | 1         | .2         |
| 31-40        | 66        | 10.5       |
| 41-50        | 105       | 16.7       |
| 51-60        | 371       | 58.9       |
| 61 & over    | 87        | 13.8       |
| Total        | 630       | 100.09*    |

\*The total exceeds 100% due to rounding

### Instrument

The Teacher Mental Health Opinion Inventory (Morris, 2002) was used in this study. Although developed initially for measuring teachers' knowledge and attitudes, survey items measure general child mental health knowledge and attitudes; therefore, it has applicability to other professions. Given its initial intent to measure teacher knowledge, five questions (7, 27, 37, 38, and 40) use the word "teacher," and this word was replaced with "occupational therapist." Also, item 37 uses the word "therapist" to mean

“psychotherapist”; therefore, the word “therapist” was changed to “psychotherapist” to avoid having the item use the word “therapist” twice which may have confused the reader. Please see Appendix H regarding permission to use and modify the instrument.

The Teacher Mental Health Opinion Inventory (Appendix I) was developed to measure teachers’ basic knowledge about child mental health and teachers’ attitudes of child mental health, including the availability of mental health services and the adequacy of their own academic preparation in the area of mental health (Morris, 2002). Morris asked additional demographic questions including marital status, gender, racial/ethnic background, and level of education. Marital status was not used in this study. Morris’s (2002) instrument was developed based upon childhood diagnostic criteria (DSM-IV), research-based prevalence information, commonly held misunderstandings, elements from previous public survey responses, and information from the report of the surgeon general (USDHHS, 1999). The instrument itself consists of 40 items, with 25 measuring child mental health knowledge and 15 measuring child mental health attitudes. The instrument utilizes five-point Likert items that asks respondents to select strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5) (Morris, 2002).

In addition to the 40 items from the Teacher Mental Health Inventory, participants were asked for their level of academic preparation, years in practice, age, gender, and racial/ethnic background. Also, items related to level of education, academic content, completion of psychosocial fieldwork, utilization of psychosocial knowledge in non-psychosocial fieldwork, and professional education were included. These items composed questions 41-51 of the questionnaire. The questionnaire was titled Occupational Therapy Child Mental Health Questionnaire (Appendix J).

### Validity and Reliability

The Teacher Mental Health Opinion Inventory (Morris, 2002) began with an initial pool of 154 items that were reviewed by a panel of five experts who were selected based upon their knowledge of mental health, psychology, and elementary education to determine content validity. Specific qualifications of the experts were not reported by Morris. Experts were asked to determine whether items belonged to a knowledge construct, attitude construct, or other. The terms “knowledge” and “attitude” were not defined for the experts, but rather, experts were given an example, such as Hawaii is a state would be a knowledge attitude and Hawaii is beautiful would be an attitude item (E. Morris, University of Missouri-Columbia, personal communication, February, 22, 2010). This process resulted in a 75-item instrument based upon the constructs of knowledge about mental health information and mental health attitudes. A pilot study ( $n=15$ ) was conducted, but was not adequate for factor analysis.

The instrument was then given to a total of 254 individuals composed of pre-service teachers and in-service teachers at two Midwestern universities. Morris (2002) reported the factorability of the data were evaluated using two tests, Bartlett’s test of sphericity ( $p < .001$ ) and the Kaiser-Meyer-Olkin measure of sampling adequacy (.678), both of which suggested that the data were suitable for factor analysis. Although 26 factors had eigenvalues over 1.0 in the initial solution, the percent of variance explained by a particular component decreased substantially after two components. The knowledge factor accounted for 11.5% of the item variance and the attitude factor accounted for 6.1% of the variance. Morris (2002) also used a scree plot, which supported two factors accounting for most of the variance. These results were then combined with the

underlying theoretical construct of the instrument which hypothesized two components. Following the initial solution, a second principal component analysis was conducted using a two-factor varimax rotated solution. Based upon the two-factor varimax rotated solution, eleven questions did not contribute to either component and were eliminated. Another varimax rotation was conducted to confirm that all items belonged to one of the two theorized components. Next, Morris (2002) inspected each item associated with one of the components to the original panel of experts' categorical attribution of the specific item. Items without agreement between the two methods were then eliminated and principal component analysis was completed two more times with the final instrument consisting of 40 items. Items 6, 7, 13, 15, 18, 19, 27, 29, 31, 32, 36, 37, 38, and 40 measured attitudes, and the remaining items measured knowledge. Morris (personal communication, February, 22, 2010) had initially intended for his attitude items to represent attitude toward preparation and attitude toward the availability of mental health services; however, none of these items loaded on the factor attitudes at an acceptable level on the initial solution of the factor analysis through either eigenvalues or scree test. Morris (2002) reported that the independent variable of level of training explains about 15% of the combined dependent variable of attitudes and knowledge, accounting for a moderate amount of the variance. Given this instrument will be administered to occupational therapists instead of teachers, construct validity will be established using factor analysis. In addition, although Morris found that the attitude items loaded on one construct, a review of these items suggested that they measure more than just general attitudes toward child mental illness, signifying a possibility of more than one underlying factor. Although using an already validated instrument strengthens the study, it is acknowledged that the attitude scale, which may

have more than one underlying construct, is a limitation of the survey. This limitation will be addressed through conducting a factor analysis and through a reliability check of the items.

Internal consistency reliability for the 40-item instrument using Cronbach Alpha was .6559, which is within acceptable limits (Morris, 2002). Morris (2002) reported that the Coefficient Alpha was .8017 for the knowledge component scale and .759 for the attitude scale. No other reliability measures were reported by Morris. Internal consistency reliability using Cronbach Alpha will also be calculated for the Occupational Therapy Child Mental Health Questionnaire in this study.

### **Procedures**

Data were collected through the use of a mailed survey named the Occupational Therapy Child Mental Health Questionnaire which contained the items from the Teacher Mental Health Opinion Inventory and demographic questions (Appendix J). To reduce nonresponse, Fowler (2002) suggested that the design of the survey instrument be clear and attractive. In addition, he suggested avoiding written responses unless such responses are optional. To increase response rate, the following procedures were followed. The initial mailing included a cover letter (Appendix K); survey instrument (Appendix J); and return, postage-paid envelope. Ten days after the initial mailing, a reminder postcard was sent (Appendix L). Ten days after the reminder postcard, all non-respondents were sent a letter emphasizing the importance of the study and a replacement survey to be completed (Appendix K). This method required numbering the return envelopes in order to track non-respondents. The purpose of the number was outlined in the cover letter along with assurance of confidentiality for the responses. Returned data were stored by the researcher

in a locked safe at the researcher's home separate from any numbered data that might attach a survey instrument to a name.

### **Data Analysis Procedures**

Statistical Package for the Social Sciences (SPSS) software was used to enter data and calculate statistical information. The demographic data, including age, years in practice, gender, ethnic background, and level of academic preparation, were analyzed using descriptive statistics. Factor analysis was used to validate the two constructs, knowledge and attitudes, which compose items 1-40 on the measure. Items 1-40 were analyzed individually using descriptive statistics that include frequency, mean, and standard deviation. A total score for each individual construct was calculated, and descriptive statistics including frequency, mean, and standard deviation were used. Text and tables were used to report the data.

In addition to analysis of individual items and construct scores, analysis of association was also completed. A Pearson's  $r$  was used to analyze the relationship between the knowledge and attitude construct. Pearson's  $r$  was used to compare knowledge and attitude scores to academic course content, application of psychosocial knowledge in non-mental health fieldwork, continuing education experiences, and professional practice experiences. An independent t-test was used to compare knowledge and attitude scores of those who did and those who did not complete mental health fieldwork. An alpha level of  $p \leq .05$  was required to indicate significance of the findings. Tables and graphs were used to report the data.

In order to compare level of education (bachelors, masters, and doctoral), ANOVA was utilized. ANOVA was used to compare groups separately on knowledge and attitudes.

An alpha level of  $p \leq .05$  was required to indicate significance of the findings. Tables and graphs were used to report the data.

### **Mixed-Methods Data Analysis Procedures**

Because the convergence model of triangulation design was selected, the data analysis for quantitative and qualitative methods was completed individually as reported above; then, the data were converged during interpretation of the data analysis. The convergence of data were completed through a comparison of the data through discussion and is reported in Chapter 5. Creswell and Plano Clark (2007, p. 136) suggested using the following questions in this process:

- (1) To what extent do the quantitative and qualitative data converge?
- (2) How and why?
- (3) To what extent do the same types of data confirm each other?
- (4) To what extent to the open-ended themes support the survey results?
- (5) What similarities and differences exist across levels of analysis?

## CHAPTER IV. FINDINGS

This mixed-methods study examined school-based occupational therapists' child psychosocial knowledge and attitudes, along with how therapists developed psychosocial knowledge and attitudes. Since a triangulation convergence model design was used, the findings for the qualitative and quantitative components of the study are presented separately in this chapter and then converged through comparison and contrast of data sets in Chapter 5.

### Qualitative Findings

The broad qualitative research question is "What meaning do school-based occupational therapists give to their experience in developing child mental health knowledge and attitudes?" Subquestions include: (a) What experiences have influenced the development of child psychosocial knowledge and attitudes? (b) How have different contexts (academic, fieldwork, and practice) influenced the development of psychosocial knowledge and attitudes? (c) What are the key constituents that influence the development of child psychosocial knowledge and attitudes? This section of the chapter presents a description of the analysis procedures and subsequent findings of the qualitative portion of the study in a detailed and descriptive manner.

### Data Analysis

Giorgi and Giorgi's (2008) method for data analysis, as described in Chapter 3, was closely followed. The focus of the analysis was to understand the experience of school-based occupational therapists in developing their psychosocial knowledge and attitudes. Each participant was asked to comment on the following broad statements: (a) Tell me about experiences you have had in working with children who have emotional disturbance



and (b) Tell me about your experiences in developing child mental health knowledge. In order to be consistent with qualitative philosophy, participants were allowed to talk about any experiences related to child psychosocial knowledge and attitude that were important to them.

### **Presentation of the Findings**

The data will be presented in three parts, which is consistent with the data analysis procedures in phenomenology. By presenting the data in this method, the reader can follow the process that occurred during analysis. First, the individual interview summaries will be presented. These summaries provide an understanding of each participant's experience and represent the analysis completed on each individual interview. Second, the general structure of the experience for the entire group will be stated. The final section will discuss the key constituents which support the general structure of their experience in detail through thick, detailed descriptions from the participant interviews (Geertz, 1973). Presenting the findings in this method allows for greater transparency of the findings.

### **Individual Interview Summaries**

**P1:** P1's approach to working with children who have emotional disturbance was facilitated by key beliefs that appeared to contribute to an overall positive attitude toward the population. Meeting the child where they are at was important to P1. She went to a session with several plans in mind and "abandoned the mission" if the child wasn't ready for her plan. Abandoning the mission allowed P1 to gain trust with the child. Even though she saw value in abandoning the plan, there was a sense of pressure for connecting the session to an Individualized Education Plan (IEP) goal. She dealt with this pressure by setting a sensory consult goal on the IEP for this type of situation. Recognizing that

sometimes the school skills are not highly motivating to the child, she used occupations of interest to engage the child. P1 viewed the whole child to understand the complexities that accompany mental illness. She believed this approach was developed in her previous mental health practice. In addition to viewing the child holistically and using occupation, P1 used behavioral principles, sensory strategies, schedules, structure, consistency, visuals, and therapeutic use of self. She referred to these as her “tricks”. Something that has helped her maintain a positive attitude is accepting that progress for a child comes in “baby steps”.

Working in the school system, on school teams, and with parents was a positive, yet challenging experience for P1. She felt the systems’ demand for children to conform to the school schedule and rules challenged the client-centered view she holds. P1 recognized the presence of stigma associated with the term emotional disturbance. She described her district taking efforts to differentiate autism from emotional disturbance because the treatment is very different. Struggling to define what emotional disturbance meant, she stated it was “maybe children who had ADHD, bipolar, or a neurochemical thing going on”. She reported her district avoids the term as long as possible. Experiencing frustration with lack of follow-through by teachers and requests to intervene with children who are already escalated, P1 developed a set of strategies to make collaboration more positive. Strategies included taking time to establish rapport, referencing recent continuing education for intervention rationales, and focusing on preventative strategies. She typically experienced frustration with parents when things weren’t going well for the child, but when this occurred, she engaged in empathy by trying to understand the family and their situation.

While reflecting on experiences that have contributed to her psychosocial knowledge and attitudes, P1 said that practice in the school systems and a need-to-know impacted her most. She felt that academia had prepared her a little through case studies. Having only completed a Level I child mental health fieldwork as a camp counselor she didn't feel fieldwork impacted her child psychosocial knowledge and attitudes. P1 practiced in adult mental health prior to the school system, but felt that other than understanding the complexities of mental illness, she did not learn much that she applied to her current practice.

**P2:** P2 presented with a positive attitude toward children who have emotional disturbance. Following her philosophy of being client-centered and holistic, she used her therapeutic use of self to develop a personal relationship with the child. Doing so enabled the therapist the ability to offer choices, schedules, and structure within what is meaningful to the child. She felt that client-centered care can be a challenge in a non-client-centered school world. She was concerned that occupational therapy in America had "dropped the ball" in mental health, threatening holistic care. P2 reported that she also utilized behavioral strategies, sensory strategies, visuals, the psychodynamic model, and cognitive behavioral therapy in her practice. Her goal was to look at the child holistically as she believed children were complex. She feared occupational therapy in schools may rely too heavily on sensory, threatening holism. Although these strategies helped her to feel confident, she wished she had more knowledge for dealing with preschool children and their emotional issues. The belief that small changes are big things for these children helped her keep a positive attitude. P2 felt she had psychosocial skills, but shared that she has been slow to advertise these skills because she was afraid of work overload.

P2 believed her experience in working with teams had been like anywhere else, sometimes it's good and sometimes it isn't. P2 described her team as supportive of occupational therapy. One struggle she experienced was the team not consistently following through with behavioral plans. Believing she was slow to respond in behavioral situations, sometimes she had been frustrated with the authoritarian response of others in these situations. When collaboration was difficult, she utilized the strategies of modeling, spent more time in the classroom, and provided education about occupational therapy. She used her team for support whenever she struggled. Citing good experiences with parents, P2 felt that her role was to remind teams to look at the entire context and the stressors occurring versus just blaming behavior on "bad parenting." P2 further elaborated her concern for labeling children with emotional disturbance. She believed a stereotype of bad parenting and unmotivated children existed. Her primary concern stemmed from instances where contextual issues versus chemical origins were resulting in children being labeled emotionally disturbed.

The child psychosocial knowledge and attitudes that impacted P2 the most was her experience in adult mental health practice. She learned from this experience what not to do. In her practice with adults, she rarely informed children about what was going on with their parents. From this experience, she took away the importance of speaking to children. She also learned to listen for what is not said. She believed adult mental health practice was where she developed her client-centered approach and her ability to apply cognitive behavioral and psychodynamic theories. She did not feel her mental health fieldwork impacted her psychosocial knowledge and skills with children. Neither her bachelor's nor her two master's degree programs covered psychosocial issues of children.

**P3:** P3 believed that a commitment to looking past the behaviors a child may have ensured holistic, client-centered care. Accepting that a child may take small steps, she acknowledged the importance of meeting the child where they were at rather than pushing them when they were not ready. Strategies she utilized included identifying occupations of interest to the child, sensory strategies, behavioral principles, schedules, structure, and consistency. The key to being confident involved not only going to sessions with many strategies in mind, but also being ready to analyze and adapt quickly. P3 reported that when children didn't want to do the school task at hand, she resorted to "master trickery," which was described as engaging the child in their occupations of interest. Even though P3 felt confident addressing psychosocial issues, she indicated that these would be "off the record" goals. She also commented that she was surprised when a fieldwork student complemented her on her ability to engage a child. P3 suggested she did have concern about articulating the difference between "counseling" and using psychosocial knowledge in occupation-based intervention.

Feeling that the school team was likely to take expertise from any discipline, P3 described her experiences in teams as positive. She stated that although she has had positive experiences on teams, this was usually in smaller districts. Larger districts tended to excuse occupational therapy after they reported. P3 identified the team as a positive support for her own struggles with children. Her experience with parents involved trying to understand the parent's perspective, especially understanding grieving that may occur. She felt that families hoped their child's issues were sensory in an effort to avoid the term emotional disturbance. She believed the district limited the use of the term because it is

associated with parent blame. She worried that parents see it as abstract and not easy to cure.

Experiences impacting P3's psychosocial knowledge involved direct contact with children and adolescents on her Level II mental health fieldwork. She developed the ability to establish rapport with a child and felt many of her skills were fostered in this setting. Overall, she felt the greatest value of her Level II mental health fieldwork was just becoming comfortable as an occupational therapist. The reason she believed the mental health fieldwork was the most influential was because in the classroom she did not understand the purpose of the information she was getting, but during fieldwork it became useful to her.

**P4:** Having the opportunity to practice in a progressive district where all interventions took place in the classroom, P4 believed this enabled her occupation-based practice. She felt that her ability to look at the whole picture, especially in regard to context, enabled her to understand the complexities of what was occurring with the child. She articulated her philosophy that she can't change a child, but she can put into place supports that will make the child successful. Regardless of the type of disability, she monitors for the emotional health of all her children. Assisting her to cope was the understanding that progress may be slow. She talked about a child having only two good 15 minute sessions in a semester, but she felt strongly that this was progress. Strategies she used with children included occupations of interest to the child, behavioral strategies, schedules, structure, consistency, visuals, activity analysis, validating the child's feelings, and therapeutic use of self. Although she felt confident in her psychosocial skills, she suggested concern for differentiating between counseling and applying psychosocial

knowledge in occupational therapy practice. She described the predicament of bringing up emotional concerns of the child if they were not impacting school performance and therefore, out of the realm of school-provided services. P4 worried that parents may expect services the school could not provide.

P4's experience with teams has been positive. She attributed this to the philosophy of her district where all services are provided in the classroom. She felt she always had support when intervening with children who have emotional or behavioral issues. P4 suggested frustration with sensory diets not being used as intended, but indicated her district has found a solution to this problem. P4 acknowledged frustration regarding the time it took for children to get the services they need because parents were not always ready. She felt the school must be respectful of the parent's grieving, however stated it was difficult because the time it takes for the parents to grieve delayed the start of services for the children. P4 valued open communication with families. She indicated that most children with emotional disturbance in her district are educated in behavioral support classrooms and are oppositional defiant. She believed it was easier for children to be labeled under autism than emotional disturbance in her district.

P4 believed that not just one experience prepared her to work with children who have emotional disturbance. Rather, she felt it was a combination of schooling, mental health practice, and a supportive school practice environment. She indicated an interest in psychology caused her to pursue a minor in psychology and later employment in mental health occupational therapy. Having worked with other disciplines was cited as crucial to the development of her skills and comfort. Had she not had these mental health practice

experiences she felt she would have been terrified to work with children who have emotional disturbance.

**P5:** P5 provided occupational therapy services in the child's real context, the classroom. She believed that the keys to her client-centered and occupation-based practice were being non-judgmental, communicating at the child's level, and engaging them in their interests. She viewed children holistically indicating that all children she sees have emotional issues. P5 believed a challenge to providing holistic and client-centered care was hearing staff speak negatively about a child, especially in front of them. Helping her maintain a positive attitude toward a child who has emotional disturbance was the recognition that she must first address self-esteem as a baby step before she even thinks about moving to the educational goal. P5 felt confident in interventions with children referencing many strategies including using occupations of interest, behavioral principles, schedules, structure, consistency, sensory strategies, visual supports, task analysis, and therapeutic use of self.

P5 used the metaphor "it takes a village" to describe her view that it takes many people to educate children who have emotional disturbance. She believed it takes more than one head to come up with ideas. Although P5 acknowledged difficulties in collaborating at times, she felt spending more time in the classroom and modeling worked to improve coordination of care. She described her experiences with parents as positive. She reminded herself to be nonjudgmental. Although she believed the lives of these children can be chaotic at times, she did not know if the chaos was caused by the child's disability or if the chaos caused the disability. She expressed frustration when parents were unrealistic or decided not to medicate a child for whatever reason. Even so, she



expressed her need to show an understanding of the parent's decision. P5 stated that she does not like the term emotional disturbance as it has accompanying stereotypes. She described emotional disturbance as a problem with the brain and viewed these students as being served in self-contained classrooms. P5 also implied stigma as she talked about other staff talking negatively about the children both in front of and behind a child's back.

An opportunity to work on a small multidisciplinary team in early practice was thought to be a critical experience for the development of P5's child psychosocial knowledge and attitudes. She felt her degree in psychology helped, as well. P5 did not directly identify how her adult mental health fieldwork impacted her psychosocial knowledge or attitudes. She stated it was with adults, so she did not learn child psychosocial knowledge and skills, but she believed that if she had not had the mental health fieldwork she would not have felt comfortable with children who have emotional disturbance. P5 indicated that this is because occupational therapists that did not have a mental health fieldwork told her they were uncomfortable and wished they would have had a mental health fieldwork.

**P6:** Key to the meaning of P6's experience was an attitude shift over time. She described feeling unsure of herself and likely to take on the negative attitudes of other professionals early in her practice. She believed that as she gained a better appreciation for occupational therapy and its philosophy of client-centered practice, her attitude changed. To her, client-centered meant looking at the child's narrative, values, and motivations. Other strategies she used in intervention that enabled more confidence included behavioral principles, sensory strategies, occupations of interest to the child, schedules, structure, consistency, therapeutic use of self, activity analysis, modeling, and validating the child's

feelings. Because P6 did not feel equipped to intervene early in her practice with children who had emotional disturbance, she expressed concern that not all occupational therapists leave academic preparation prepared. She believed that occupational therapists that have the skills don't articulate the strategies they use and face role-delineation issues.

Positive experiences in working with teams came as she learned more appropriate strategies for collaboration. She found that identifying one small thing a child can improve upon quickly helps the child and team build in a positive direction. P6 believed that finding small positives was essential to improving the attitude of teachers and her toward children who have emotional disturbance. She felt that school-based practice and client-centered care can be at odds because schools relied too heavily on parent and teacher reports versus child reports. She expressed concern that schools did not want to readily address social, emotional, and behavioral needs of children. Also present was the view that schools value academic ability versus looking at each child's individual abilities of all types. In working with parents, P6 understood that parents may express anger towards her, but that this is a reflection of grieving. She found the value in taking the time to understand the parent's experience.

Critical in the development of P6's child psychosocial knowledge and attitude was a colleague whom she viewed as emulating client-centered practice. She felt that over time she grew to have a better appreciation for the philosophy of occupational therapy through both her colleague and professional literature. Also aiding in this attitude shift was the birth of her own children because she came to understand the importance of their psyche, goals, and values. Academic training did not prepare her for this population. Completing a Level II adult mental health fieldwork was not considered helpful because it was

primarily parallel task groups and she struggled to apply what she learned during the experience to children.

**P7:** P7's experience was colored by a recent transition from adult rehabilitation to school-based practice. She felt school-based practice was like entering a whole new world. She believed that through empowering, listening, respecting, and engaging the child in their occupations, she can "treat them like little people". Describing it as "going through the backdoor," P7 recognized that school goals are not always the goals the children want; therefore occupations of interest to the child are used in intervention. She believed engaging the child in occupations of interest helped the child make small steps towards their goals. She described the use of behavioral strategies, sensory strategies, structure, consistency, schedules, activity analysis, visuals, therapeutic use of self, and validating the child's feelings as tools she used in intervention. Although she used sensory strategies, she was concerned about proving they are effective given that sometimes the results appear hours later.

P7 felt she had a positive experience working on school teams. While working with teachers and other professionals, she found that jumping in to help and spending more time in the classroom had improved her ability to collaborate with staff. P7 experienced frustration in communication with parents, at times. She believed that in her hospital practice all information was readily available so transition to the schools where information was not always readily available had been difficult. In order to cope, she described attempting to remember the parent's experience while also increasing communication attempts with parents, other staff, and community-based teams that served the child. P7 indicated frustration with school systems not wanting to pay for the services

a child who has emotional disturbance needs. She stated that she had students who were described on paper as being very violent to the point she was scared to go see them and then was "amazed" when she saw them in an alternative setting. She expressed concern that these children are often viewed as out of control and scary. Her final frustration with school systems was feeling that occupational therapy is not treated with the same respect in schools as it is in hospitals. She indicated that she experienced students being dismissed from occupational therapy without consent from the parent or occupational therapist.

P7 felt that a major contributor to her comfort in working with children who have emotional disturbance was early life experience. She believed that her Catholic upbringing and military career impacted her ability to be structured and consistent with children. She also had an early employment opportunity in the area of sexually transmitted diseases that she felt prepared her to talk to people about anything. P7 felt her Level II adult mental health fieldwork helped her to learn how to use humor and to understand some of the parents she works with today. P7 indicated that her academic experiences hadn't addressed psychosocial issues of children in an impacting manner.

**P8:** As P8 described her practice, it was evident she used a client-centered and holistic approach to working with children who have emotional disturbance. She discussed the importance of looking at the context when treating a child. She also believed it was essential to validate how a child was feeling. She felt validating how the child feels was one way to help a child progress, even if progress occurs in small steps. Staying true to client-centered philosophy, she felt her willingness to accept the child's progress, even if it was small, was essential. P8 used behavioral strategies, structure, consistency, schedules, visuals, therapeutic use of self, sensory, activity analysis, and validation in intervention.

When discussing psychosocial occupational therapy, P8 reported that she tried to imbed social skills within her interventions, but they are not stated IEP goals. She expressed concern for differentiating between counseling and applying psychosocial knowledge in occupational therapy intervention.

P8 described an experience of positive interaction with teams and parents; however, she acknowledged frustrations, as well. Her biggest frustrations were with system-wide issues. She felt sad that her system intervened only after the child failed. A decision to close an alternative classroom saddened her because students were doing well in that setting. She believed students who return to regular education would not continue with progress they had made. She shared that her district had contracted for mental health services, but she felt these services were poor. P8 acknowledged that teachers had many things to do and so when they were asked to do one more thing she felt it could be overwhelming. However, in her experience, teachers who followed through were happy with the results. She felt that providing occupational therapy in-services improved collaboration. In addition to showing empathy for teachers, she displayed empathy for parents. P8 indicated that at times she had been the target for parent's anger, but she recognized this as grieving. She believed that sometimes parents are overwhelmed with their own issues. She saw that life for these families can be "out of whack," so she needed to accept what was out of her control. She seemed to understand the overwhelming nature of a school meeting. She coped with this by educating parents on ways they might advocate for their child.

P8 indicated that having her own son who has Aspergers disorder has forced her to gain more child psychosocial knowledge. It helped her to understand the experiences of a

parent, as well. Although P8 completed a Level II mental health fieldwork, it was with adults and she wished she would have had an opportunity to work on a pediatric unit. She felt this would have allowed her to learn more about applying this knowledge to children. P8 felt her academic classroom experience didn't prepare her to work with children who have emotional disturbance.

**P9:** P9 approached children by looking at all of their systems (sensory, cognitive, and emotional) and the contexts the child engaged in, allowing for a holistic view of the child. She believed that applying unconditional positive regard, empathy, compassion, and meeting the child where they are at was important. P9 felt that she related well to children because her occupations are their occupations. For example, stated she liked science, which many of the children she serves like. She believed that taking a stance of finding even the smallest positive through activity analysis kept her more positive in working with children who have emotional disturbance. In addition to the aforementioned strategies, she also applied behavioral principles, sensory strategies, consistency, structure, schedules, persistence in exploring the problem, and therapeutic use of self. As P9 discussed the term therapeutic use of self, she questioned whether this was a psychosocial skill that required training or if it was just something everyone possesses. She indicated that over time she came to believe it was a skill because not everyone can do it. When she discussed psychosocial occupational therapy in schools, she raised concern that just looking at the mental health aspect puts occupational therapists at risk for not being a holistic practitioner. At the same time, she believed therapists that just addressed fine-motor skills were not engaging in holistic practice either. Although mental health goals are typically not her stated goals, she described instances where she felt her intervention was imperative

to getting the child to be able to engage in success experiences that build self-concept. P9 was asked to define psychosocial knowledge, but at first was hesitant to define what it meant. She felt it involved the “psychological, cognitive, emotional, and inter-relational aspects of one’s self”.

P9 shared both frustrations and positive experiences in working with school teams and parents. One frustration she experienced was inadequate services for children who have emotional disturbance. She believed that emotional disturbance was a “catch all” term that implied complex needs being served in one room. She felt that there was a lack of knowledge about what causes the disorders and how to treat them. She stated that the teachers and staff expect a certain behavior and these children deliver because that is what is expected of them. P9’s experience working with self-contained programs included the “very best” teachers she had known and the “most burnt out”. She portrayed empathy toward parents and believed her role was to help highlight even the smallest positives for parents.

Childhood experiences fostered the development of P9’s comfort with children who have emotional disturbance. She described herself as an awkward, shy, and maladjusted youth who grew up with a parent who had a physical disability and worked in special education. She had personal experiences herself with counselors. She also believed that an early practice experience where she did not know she could discharge a difficult child impacted her ability to engage children who have emotional disturbance. Even though P9 completed a Level II mental health fieldwork with adults, she struggled to identify child psychosocial knowledge she gained from the experience. She felt it prepared her to deal with any defense mechanisms a child might engage in to avoid intervention.

She indicated that academia gave her a name and understanding for the concept of therapeutic use of self and its effectiveness in practice, but she hadn't felt it was developed there.

**P10:** Analyzing the whole and not just the parts of the child was something that P10 felt was essential in treating children who have emotional disturbance. She believed in meeting the child where they were. Accepting that small steps are really very large steps for these children helped her to maintain a positive attitude. Talking directly to the child and acknowledging feelings was highly valued by P10. She displayed confidence as she articulated the ability to understand the implications of self-confidence levels on behavior. She employed many other strategies in her practice including behavioral, sensory, therapeutic use of self, structure, consistency, schedules, activity analysis, and willingness to analyze the complexities of the child. Even though P10's case descriptions provided evidence for her ability to utilize psychosocial knowledge with success, when asked what psychosocial meant to her she was reluctant to answer. She stated she had hoped the researcher wouldn't ask that question. She described it as understanding people and where they are coming from. P10 expressed concern about the need to differentiate between counseling and using psychosocial knowledge in school-based practice. She indicated that she does not set a psychosocial goal because occupational therapy goals come under the motor section of an IEP. The exception for her was if the goal related to motor, however, she would address social interaction in intervention even if it wasn't a stated occupational therapy goal. She described being complemented on her ability to engage a child and apply behavioral principles, yet wondered herself if they thought she



was a good occupational therapist. She appeared to undervalue her psychosocial knowledge.

P10 described her biggest frustration on the school team was intervening during a behavioral episode. She stated that episodes happen quickly and one can't always predict what the other person is going to do. She felt that she was able to sit down with a team member afterwards and analyze a situation so that it went better the next time. Feeling positive about families, P10 utilized rapport building with families stating that it was important to have a relationship with parents because she learned concerns and thoughts of the parents. P10 expressed that schools were good at speaking to parents and teachers, but not the child. She shared her view that the term emotional disturbance was not used much because parents can't handle it. In addition, she believed that children given the label of emotional disturbance felt judged based on the label or resource room they utilized.

Working with children with disabilities since high school was identified as where P10 developed her comfort working with children who have emotional disturbance. Given this life experience, she felt that her Level I mental health fieldwork did not impact her. She had not completed a Level II mental health fieldwork. P10 shared that her psychology degree contributed to her knowledge, but she did not feel her occupational therapy training had impacted her psychosocial knowledge.

**P11:** Keeping true to occupational therapy philosophy, P11 described how client-centered and occupation-based practice enabled her to suspend her own judgments in order to be respectful to the client and meet them where they are. She recognized that this can be a challenge when the school goal is not the child's goal. P11 acknowledged that progress can be slow, but she expected this and kept a vision in mind, stretching it bit by bit as the

child made progress. Strategies she used in her practice included behavioral principles, occupations of interest to the student, sensory strategies, structure, consistency, schedules, activity analysis, therapeutic use of self, persistence to investigating the complexities, and validation. She also felt her interventions are guided by occupational therapy theories, such as the Model of Human Occupation and Person Environment Occupation Performance Model. In her discussions of psychosocial occupational therapy in schools, she struggled to define psychosocial at first, but came to define it as “understanding how everything is mitigated by someone’s experience”. She believed it was hard to tease out exactly what psychosocial knowledge is because it is the core of occupational therapy.

P11 described her experience with teams and parents as overall positive because they are an extension of child and also her clients. She applied the same principles of rapport building and empathy when working with teams and parents. She described colleagues as very supportive to her and she to them. She believed that when she struggled with collaborating it was more a personal issue. She felt that collaborative relationships formed over time and that she needed to understand the slow progression in these relationships. A challenge she experienced with parents is the need to be empathetic, yet also realistic and honest with the family. A concern for her was that she sees districts often not wanting to pay for specialized services for children who have emotional disturbance. The term emotional disturbance was defined by P11 as being emotional and behavioral issues that have gotten out of control and in crisis.

Although P11 felt that it was the integration of life, academia, and practice that allowed her to develop her psychosocial knowledge, she drew on two particular experiences that were meaningful to her. The first was growing up with a father who ran a

sheltered workshop for people with developmental disabilities. Watching her father instilled in her the value of respecting and empowering others. The second was the opportunity to teach occupational therapy theory where she believed she gained a better appreciation for the psychosocial core of occupational therapy. She believed that her Level II adult mental health fieldwork further fostered what her father had taught her.

### **General Structure**

School-based occupational therapists have a positive attitude toward children who have emotional disturbance. This attitude is maintained by staying true to the occupational therapy philosophy of holistic, occupation-based, and client-centered practice. School-based occupational therapists deal with the challenges they face by accepting that children who have emotional disturbance may progress slowly in intervention. The confidence these therapists experience stems from having many types of strategies at their disposal, as well as the ability to shift gears, think outside the box, and adapt on the go. Although school-based occupational therapists utilize many psychosocial strategies, they have a difficult time directly articulating the psychosocial knowledge base unique to occupational therapy. It may be that psychosocial knowledge is a hidden treasure, undervalued skill, or just a misunderstood term. School-based therapists acknowledge a presence of stigma toward children who have emotional disturbance. School-based occupational therapists possess a realistic view of working within the system, on school-based teams, and with parents. This realistic view encompasses the employment of empathy and specific strategies to maintain a positive attitude. Rich experiences in which school-based occupational therapists have been able to gain comfort with mental illness and

occupational therapy philosophy contributed most profoundly to their child psychosocial knowledge and attitudes.

### **Key Constituents**

Eight key constituents stood out in the descriptions provided by the participants and supported the general structure of school-based occupational therapists' experience in working with children who have emotional disturbance. It is important to remember that even though the constituents are presented separately, it would be wrong to view them as independent of one another. For example, school-based occupational therapists presented with an overall positive attitude toward children who have emotional disturbance, but this attitude was facilitated by three key constituents: (a) staying true to occupational therapy philosophy in school-based practice, (b) accepting "baby steps", and (c) having a "bag of tricks". Another key constituent, "psychosocial occupational therapy: a hidden treasure, undervalued skill, or just misunderstood term", is more fully understood in the context of the constituents "staying true to occupational therapy philosophy" and "having a bag of tricks". Because occupational therapists viewed parents and teachers as their clients, the key constituents "realistic view of school system and team" and "using empathy with parents" are interrelated. Even though occupational therapists maintain a positive attitude about working with children who have emotional disturbance, their families, and school team, still present is the key constituent "the term 'emotional disturbance' accompanied by stigma" which underlies all constituents. Finally, "rich experiences impact psychosocial knowledge and attitudes" helps to understand how therapists came to their current knowledge and attitudes.

*Staying True to Occupational Therapy Philosophy in School-based Settings*

All 11 participants either directly or indirectly referred to their commitment to holistic, occupation-based, and client-centered practice by stating it had impacted the way they viewed children with emotional disturbance. These three principles appeared to be the cornerstone of how they began and carried out their clinical reasoning process. As participants described how they formed their initial understanding of the child, most descriptions reflected the need to understand motivational factors and occupations of interest to the children. Participants also discussed the need to understand the “whole picture” which included descriptions of the mind, body, spirit, and contexts that impact them. After forming the initial view of the children, participants selected interventions most appropriate for the children on their caseload. However, they continued to keep the mindset that they needed to learn more about the child in order to understand them and be able to shift gears in the event that intervention plans were not effective.

Although the principles of holistic, occupation-based, and client-centered strategies could be separated, it would be done so artificially for this group. As the participants spoke of their practice there was a sense that the dynamic interaction between holism, occupation-based, and client-centered principles helped them maintain a positive attitude. For example, P2 was explicit in discussing her view that client-centered practice enabled her to look at the whole child. To her, being holistic involved looking at a child and the contexts that supported the child. A part of the process of viewing the child holistically was establishing rapport in order to understand interventions that are meaningful to the child. P8 used a similar process to P2, but added the importance of validating the child’s feelings. To P1, the therapy process involved first learning the child’s occupations of interest and comfort zone. Learning the child’s interests allowed her to go to sessions with

several options in mind, allowing the child to guide the session through making choices. If the child had a bad day, she believed following the child's lead and abandoning the plan helped facilitate trust for future sessions. Understanding the bad day or any behavioral difficulty involved looking at the whole picture, including what was going on with the child, the child's contexts of participation, and the people surrounding the child.

Directly articulating occupational therapy philosophy in practice, P3 stated, "I think definitely as occupational therapists we all do this, but we can look at the whole child so if the regular run of the mill way that we treat kids is not working we immediately go to outside the box and start thinking, ok, how can we get him involved in this way?" Thinking outside the box triggered consideration for the child's occupations of interest and reminded her to communicate with the child. Like P1, P3 felt that if the child wasn't ready, the therapist needed to respect that position. As well, P3 looked beyond the behaviors to see who the child really was in order to ensure holistic, client-centered care. P4's interventions have always taken place in the context of true occupation, in the child's classroom. Over time, she learned the importance of looking holistically at the complexities of the child. Most importantly she learned that addressing the context led to the ability to provide an environment that supported and fostered the progress of the child. P4 cited modifying the environment as the most important factor in positive outcomes. Similar to P4, P5 articulated the importance of a holistic view of the child regardless of the type of disability. She also intervened in the child's true occupational context, the classroom. Key to her client-centered, occupation-based practice was being non-judgmental, communicating at a child's level, and engaging children in their interests.

A deeper understanding of occupational therapy and its philosophy of client-centered practice triggered an attitude shift for P6. Early in her practice, P6 wondered how she could make a difference where other team members struggled resulting in her discontinuing occupational therapy intervention. Over time, she came to see the need to understand the child's narrative, values, and motivations. Looking at the whole child, something she felt the school neglected, was felt to be essential in her practice. "Treating them like little people" was P7's motto. This motto encompassed empowering children through listening, respecting, and engaging them in their occupations. For instance, when P7 identified that her client was sad because her goldfish died, she used the occupation of story-writing to address both fine motor skills and allow the child to talk about her goldfish. P9 believed that having unconditional positive regard, empathy, compassion, and engaging children in their occupations were most important to working with children who have emotional disturbance. In addition, P9 stated she needed to "meet the child where they were at". She felt that understanding the systems of the child (sensory, cognitive, and emotional) and the contexts the child engaged in enabled a holistic view of the child. Like P9, P10 and P11 felt that meeting children where they were was essential for client-centered, occupation-based practice. P10 described several scenarios of analyzing the "whole" and not just the parts of a child. For example, she reflected on self-confidence and its impact on engaging in tasks that are difficult for a child. P11 stated she suspended judgment when meeting children in order to be respectful and look for what drives the child. A specific strategy P11 used to be client-centered was developing a session schedule with the child in order to ensure that activities of interest to the child were incorporated into the session.

Several of the participants acknowledged challenges to holistic, occupation-based, and client-centered practice in school-based settings. P1, P3, P7, and P11 recognized that the school skill that needed to be addressed in therapy was not always a skill that was important to the child and therefore not client-centered. In fact, P3 used “master trickery” in order to engage the child when this occurred. When asked to define master trickery, she described the use of occupations of interest to the child. P11’s strategy was to have the child map out some things they wanted to do, but also incorporating the school goal. Another phrase used by P7 to explain the use of occupations of interest to the child to get them engaged in the school skill was “going through the backdoor”. According to P6 and P10 another challenge to client-centered practice was that teams relied too heavily on parent and teacher reports versus talking to the child. In addition to not speaking directly to children, P5 suggested therapists needed to be aware and not join in negatively speaking about children, as this can lead to a decline in client-centered care. P1 and P2 expressed that children are often forced into a system that has a schedule and rules that cannot be changed. The system then demanded the children to change, presenting as an obstacle to client-centered care.

Another challenge reported by participants was that schools are not focused on the whole child. P6 felt that schools did not want to address the social, emotional, and behavioral needs of children, so those needs are often overlooked. She believed that if a child didn’t have the tools to do well academically, then the child’s self-confidence suffered. She wished schools could value all children and all abilities. P2, who practiced in Britain at one time, was adamant that occupational therapy in America had dropped the ball when it came to looking at the mental health aspect of the person. She felt holism in



schools was threatened by neglecting mental health aspects of a client and by relying too heavily on sensory interventions. P9 suggested occupational therapists must be more vigilant in order to maintain occupational therapy's philosophy of viewing the client holistically. As she discussed school-based therapists intervening for handwriting or mental health reasons she felt dismayed stating, "The second we start dissecting people out into their component parts we miss something of the comprehensive whole that makes them who they are."

#### *Accepting Baby Steps (Slow Progress)*

All 11 participants acknowledged frustration when working with children who have emotional disturbance because of the potential unpredictable behavior and avolition. Participants dealt with this frustration by accepting that improvements occur in baby steps. P2 shared an experience where she heard a child give a compliment outside the session, something they had worked on in therapy. She stated, "it was small, but a big thing for him learning to model behaviors." Understanding that children progress in "baby steps" was important and kept P1 on track. P3 described that small steps, such as even getting the child to engage, are key to progress. Further supporting the importance of accepting baby steps, P4 stated, "I guess the biggest thing is being patient and being happy with small successes". She discussed a child who, over one semester, had only two good 15-minute sessions, but she felt it was progress. According to P5, building self-esteem and developing trust were the baby steps leading to the educational goal. A small step for P6 involved finding one skill a child could improve on quickly so the child and team could build on it. "Sneaking through the backdoor" is how P7 accomplished small steps to progress. She engaged children in activities they enjoyed, but the last step of the activity was the small step she wanted the children to make toward their goal. P8 identified fine

motor tasks as an antecedent for many behavioral struggles. Therefore, she validated the child's feelings about their abilities, which she felt helped them to take that small step. She shared that she must accept the small amount of work children will do until they are ready to progress. P9 believed that highlighting the small steps a child can succeed at was imperative. She suggested that occupational therapy's key skill of activity analysis was perfect for these situations because it enabled her to catch the very small things the child can do and sharing these with their parent. P10 stated, "You need to be happy about what might be a tiny little thing for rest of the world, but is a big thing for this kid or this family". P11 further elaborated that, although progress may be slow, it is about having a vision and then stretching it.

#### *Having a Bag of Tricks*

All 11 participants described case scenarios involving children they served who had emotional disturbance. In the context of cases, participants highlighted strategies that some referred to as their bag of tricks. The nature of a bag of tricks seemed to aid in their ability to feel confident in working with children who had emotional disturbance. P1 and P3 articulated this clearly, suggesting the need to go to sessions fully prepared with many strategies and ready to think on their feet. As mentioned earlier, all 11 therapists described using occupations of interests in their arsenal of strategies. The use of behavioral principles, such as identifying antecedents and providing reinforcements in treatment sessions were mentioned by all participants. Schedules, structure, and consistency were used by all participants to prevent behaviors, such as refusing and tantruming. In fact, P1 stated that she used schedules, structure, and consistency, which she denoted as autism strategies, for all children with emotional disturbance because a pediatrician told her that

she couldn't go wrong using those strategies with any child. Using visual supports to assist children who might be on the autism spectrum, but also with children who may become emotionally overwhelmed and can't talk was referred to by P1, P2, P4, P5, P7, and P8. All participants mentioned the use of sensory strategies for children with emotional disturbance, however P2 expressed that she was ambivalent about sensory strategies and that she was concerned that occupational therapists relied too heavily on sensory. P7 expressed concern about showing that sensory has actually worked, given that results can occur hours later. All 11 participants described the use of task analysis to provide a just-right challenge. P10 and P4 even identified using simple-sure success activities below the "just right challenge" in order to motivate a child through positive experiences. Research, colleagues, and continuing education were used by all participants as strategies to solve a problem. Because of the complexities of some children's behaviors, P1, P2, P4, P9, and P10 described persistence and willingness to investigate as tools in their "bag of tricks". In fact, P1 stated, "You can't just, you know, a meltdown is a meltdown, because it's not. So you can't just look at what's happening. You have to look at why it's happening and what's going to happen next and kind of, more just very careful to look at the big picture when you're dealing with mental illness and mental health issues."

It was clear that participants were most familiar with behavioral strategies, but a few mentioned other traditional mental health theories in their practice. Having practiced many years in mental health, P2 discussed how she applied the psychodynamic model to look at what is going on with the child. P2 mentioned specifically the use of cognitive behavioral therapy with children, although stated she would like more information on using it with children. P10 indirectly referenced cognitive behavioral therapy, suggesting

that a child's thoughts about self may impact his or her behavior. Validation of the child was mentioned directly by P8 and P11 while several other participants mentioned validation indirectly. P7 shared how she allowed a child to stop and talk about her dead goldfish. P6 discussed saying to a child that it was okay to be mad. P4, P9, and P10 stated it was important to acknowledge the child's feelings.

Therapeutic use of self was discussed by all participants. P1, P2, P4, P8, P9, and P11 explained it as establishing rapport and using empathy in order to have a working relationship with the child. P7 reflected on using humor, listening to children, and allowing them to talk through worries as components of therapeutic use of self. P10 also described therapeutic use of self as using humor, and went on to reflect on interaction with children on a personal level to find out more about them. Demonstrating therapeutic use of self, P8 shared an experience when she calmed a child who was distressed by slowly rocking her own body. P6 felt therapeutic use of self involved the use of modeling her own frustrations and coping strategies for the child. Staying calm, being non-judgmental, caring no matter what you hear, and not degrading people were referred to as components of therapeutic use of self by P5. P3 tapped into the child's quirks or interests and was conversational with the child to practice therapeutic use of self. Similarly, P9 felt she could really use herself in therapy and stated, "I'm pretty real with them and I'm pretty geeky myself and pretty honestly interested in space and Harry Potter and how volcanoes work and all that stuff." P11 felt therapeutic use of self was "turning it over to him and you saying where should we go with this or that?"

*Psychosocial Occupational Therapy (A Hidden Treasure, Undervalued Skill, or Just Misunderstood Term)*

Throughout the interviews, participants provided evidence of child psychosocial knowledge through case examples, yet when asked more directly about what psychosocial knowledge is and what impacted the development of this knowledge, they had difficulty answering the question. For example, when asked about educational experiences, such as mental health fieldwork and its impact on child psychosocial knowledge, most replied that their experience had been adult mental health so they were not so sure they had learned any child psychosocial knowledge. Although they may not have gained specific child psychosocial knowledge in these experiences, they had gained psychosocial knowledge which they used in their practice today evidenced by the case scenarios they provided and the examples given under the key constituents having a bag of tricks and rich experiences impact psychosocial knowledge and attitudes.

As the interviews progressed, this pattern continued to occur, so at the closure of the last three interviews, the researcher specifically asked, “What is psychosocial knowledge or skills to you?” Those asked hesitated to answer. In fact, P10 said, “I was thinking when I was coming here; I hope she is going to tell me what she means by psychosocial.” P9 stated, “That is a good question. You are the doctoral student, you answer the question.” In this dissertation, please see pages 20-21 for a clear explanation and description of psychosocial knowledge and skills. Although participants were hesitant to provide definitions, those who provided definitions seemed to reflect what psychosocial knowledge and skills are as defined by the occupational therapy profession. P11 felt it was “understanding how everything is mitigated by someone’s experience” including looking at cognition, values, habits, routines, and being client-centered. P10 explained

psychosocial knowledge and skills as understanding psychological factors, the psychological state of the person, his/her social being, and how these interact. She ended by saying, “understanding people and where they are coming from.” P9 stated, “Well, I think it is the psychological, cognitive, emotional, inter-relational aspects of one’s self that give us who we are, honestly.” Further supporting the uncertainty about the term psychosocial was P2’s view as a practitioner trained in Britain: “I think here OT has really dropped the ball on adult and child mental health. Oh, my gosh, we missed the boat here.”

Participants also expressed worry about exactly what the term psychosocial meant. P3, P4, P8, and P10 all implied concern about occupational therapy “counseling”, which suggested some anxiety for them that the term psychosocial occupational therapy in schools was potentially referring to counseling versus using psychosocial knowledge in their occupation-based interventions. They were concerned about the appropriateness of an occupational therapist counseling children. For example, P10 felt it essential to clarify that it was not her role to handle the counseling of a child who may have been abused. She would like to see a differentiation between counseling and using psychosocial knowledge and skills in occupational therapy practice. While discussing the term psychosocial knowledge with P8, she stated that she hadn’t thought of it as meaning applying strategies like validation and therapeutic use of self in occupation-based intervention. Instead, she was concerned about current occupational therapy literature regarding psychosocial occupational therapy in schools and exactly what the articles were implying. She didn’t want occupational therapists “hanging the shingle out” if they were not prepared to intervene from a psychosocial standpoint. The experiences shared here raise concern about

an accurate understanding of what psychosocial knowledge means and how this knowledge is applied in occupation-based and client-centered practice.

Further demonstrating that occupational therapist participants in this study may undervalue, hide, or misunderstand psychosocial knowledge, was how they spoke openly about using occupation-based and client-centered practice and their value in doing so, but later in the interviews referred to it as a method of tricking the child. Although it was not felt that they were using the statement “tricking” as the word actually means, it suggested a potential undervaluation or hiding of the very philosophy they highly valued. For example, P7 talked about addressing fine motor skills by “sneaking through the backdoor”. Because the child did not like handwriting, she engaged the child in making a puppet that required the child to write her name on her final product. P7 actually gave many examples in which she was being very client-centered and occupation-based, which she valued, but then would describe it as a tricking method of getting clients where they needed to be. P3 even referred to it as “master trickery” when she would find something of interest to the client. P1 and P6 also referred to running out of “tricks” at times in their practice when they discussed strategies they used.

Supporting the hidden nature of psychosocial occupational therapy was the participants’ reference to “off the record goals”. P3 discussed how she felt she had the background to address psychosocial issues, but it would be an “off the record goal” versus a stated goal on the IEP. She described a child with depression who she saw for fine-motor skills and she felt that talking with him about how recess went was more important and impacting than just doing therapy. P1 expressed concern that if a child was having a bad day it may not be covered under her IEP goal, so she always tried to have a goal for

“OT consult for sensory supports”. By having a sensory support goal for calming and talking with the child, P1 was still able to address the IEP goals. She felt it was imperative to meet the child where they are in the moment because it allowed for the establishment of trust, yet she worried about not meeting the IEP objective. P5 stated that her goal on paper may be fine motor and education related, but before she can even think about addressing fine motor skills she has to address self-esteem through success building activity. P9 shared an experience with a child she was seeing whose mother was terminally ill. She was seeing him because he was so sensory dysregulated and her job was to use intense input to get him ready for seat work; however, the end goal was not fine motor related. The goal really was about building self-esteem, self-concept, and self-worth by engaging him in activities he could experience success with so that his academic performance would get better. P10 felt it was not appropriate for occupational therapists to set a psychosocial goal because they are responsible for goals under the motor section. She felt that if the goal related to motor it would be appropriate. An appropriate goal might be accepting assistance for an activity of daily living. Though she did not see it as her role to set a psychosocial goal on paper, she indicated she addressed social skills in a group. P8 shared that current IEP goals of her students do not reflect social skills, but she tried to embed them in the interventions. P4 discussed the dilemma of bringing up psychosocial or emotional concerns because it may not be impacting school and therefore, it may not be the school’s place to bring it up.

If, indeed, occupational therapists are “hiding” their skills, P2 and P10 provided a reason for why this might be occurring. They felt occupational therapists have the psychosocial skills, but were also concerned about work overload. P6 felt that not all



occupational therapists were well-prepared with psychosocial knowledge, and those that are, struggle with role delineation. She stated, “But definitely the occupational therapists don’t articulate that they use those strategies”, referring to psychosocial strategies. P9 related that, throughout her career, she wondered if giving unconditional positive regard and using therapeutic use of self were really skills or something anybody could do. She said she has drawn the conclusion that it must be a skill because not everyone can do it. P10 described how a fieldwork student complimented her on her ability to engage a child and apply behavioral principles. She added, “But I’m thinking, ‘does she think I’m a good OT’, but that was what stood out to her.” P3 commented on being surprised when a student complimented her on how she related to a client and was able to calm him down.

#### *Realistic View of the School System and Team’s Impact on OT Practice*

Present in the experience of the participants in this study was the acknowledgement of both frustrating and affirming experiences working in the context of the school system and as a part of a school-based team. Frustration for some participants stemmed from system-wide issues. Although P8 felt that schools were like any other system, “trying to get by”, she was concerned about her system’s requirement for children to fail before they were served. P8 and P9 both discussed frustrations with specific services for students with emotional disturbance. Sharing that her system had contracted for mental health services, P8 felt the results of these services were poor. P4 also expressed a lack of services for children with emotional difficulties at school. P9 spoke of a high turn around rate for professionals due to burn out which resulted in lack of consistency for the children and frustration for her. Sadness was expressed by P8 who said her district was shutting down alternative programs in the next year due to the need for highly trained teachers and the inability to get them. She stated that these smaller environments have allowed the students

to excel, and those environments will now be gone. Similarly, P7 and P11 felt that schools try not to send children to alternative education programs because of the expense, even though the students benefit greatly from them.

As participants shared their experiences on school-based teams, all reported positive experiences and some frustrations, which they felt were to be expected. P2 stated, "I think it's like anywhere. Sometimes it is a challenge and other times it isn't." P1's experience has been that some teachers are great and others do not want to use the strategies she suggested. She felt her frustration stemmed from when teachers asked her to intervene with a child after the child had already escalated, instead of following the prevention plan she provided earlier. She seemed to rationalize the lack of follow-through by acknowledging that the teachers were with the children all the time, where she was not, and that this likely fueled the teacher's frustration and burnout. P2 and P10 felt frustration related to a lack of consistent follow-through by the team on behavioral plans. P10 felt behavioral episodes happened quickly and that she couldn't always read what the other adult was going to do which was frustrating. P2 felt she was slow to respond to a child's behavior. When this occurred, she would become frustrated because the other adult would respond in an authoritarian manner which was inconsistent with her occupational therapy philosophy. Even though P10 struggled with the quick responses required in behavioral episodes, she reported a positive experience following the incidents when the teams sat down to process what occurred and how they could prevent the behavior or react in the future.

P3 felt that the team was likely to take expertise from any discipline whether or not it was specific to their discipline. In her experience, she felt that smaller districts were

more likely than larger districts to have occupational therapy involved in mental health issues. In larger districts she was excused after reporting occupational therapy data. Describing an extremely positive experience working with teams, P4 credited this to the district's philosophy of services being provided in the classroom. She described several examples of how she and a teacher worked together on behavioral issues. P4 stated she experienced frustrations with sensory diet plans being used inappropriately, but a solution was having the teachers write down how they used a sensory diet so that it is understood by both the occupational therapist and the teacher.

P5 and P7 also described a positive experience working with teams. P5 felt "it takes a village" to support children with emotional disturbance. She believed one person could never have all the ideas to help a child. P7's only concern is that sometimes team members don't want to give it their all, but she felt this could be an issue anywhere. P5 noted that her only frustration occurred when she observed team members speaking negatively about the children and their behaviors. P6 felt she had a rather negative experience working with teams early in her practice. She felt that she allowed the negative attitudes of other team members to influence her attitude. She described that, over time, she learned more effective strategies to collaborate and this shifted her attitude to a more positive collaborative experience. Even though she empathized with teachers and the amount of work they are asked to do, P8 stated she felt frustration when recommendations were provided but not tried. P9 described a positive experience working with teams. She acknowledged that some of the teachers in the emotional disturbance classroom were the best she worked with while others were the most burnt out teachers she worked with and that this impacted collaboration. Another positive feeling about working on a school-based

team was expressed by P11. She stated that when collaboration was not effective this was usually an individual personality issue and not reflective of the entire team.

The participants' realistic expectation for both positive and frustrating experiences in collaborating with teams to address children with emotional and behavioral issues seemed to have led to the development of strategies to lessen frustration and improve the quality of collaboration. P1 felt that the use of these strategies impacted whether or not the experience was positive. Establishing rapport with individual teachers was a key to a more positive experience for P1, P7, and P11. P7 stated she established rapport by just "jumping in" when she saw a teacher needed help. P11 felt rapport building was natural because, just as the child is a client, so is the teacher. She also acknowledged that rapport building can be slow and needs to be individualized with each teacher. Establishing credibility by referencing continuing education for rationales for suggestions and focusing on prevention of behaviors was useful for P1 and P11. Through occupational therapy in-services, P1, P2, P8, and P11 improved collaboration with teachers. P2, P5, P7, and P11 felt that when they had difficulty collaborating with a teacher or the teacher not following through with recommendations, spending more time in the classroom getting to know the staff, and modeling more appropriate interventions worked the best. Having written plans prepared by the teacher helped P4 understand how teachers used particular interventions prescribed by occupational therapy and has resulted in a better collaborative experience. P6 felt that collaborative success was more likely if she identified simple, tangible recommendations for teachers so that teachers felt more successful. Being willing to sit down and process a situation or discuss a behavioral approach made collaboration more positive for P10. In addition to utilizing strategies discussed above, all 11 went to the team when they needed

help. Asking others on the team for help suggested that even though participants had experienced struggles with the team, the team was a positive resource for them.

### *Using Empathy With Parents*

Participants acknowledged frustration while working with parents; however, the essence of the participants' experience seemed to be dealing with frustration by applying the principles of empathy (trying to understand someone else's experience). To illustrate this empathy, examples from each participant's experience will be provided. P1 described frustration with the parents when things weren't going well for the child, but when this occurred she engaged in understanding the extended history of the family and the parent's perspective about their child's education. Sometimes this required talking to others on the team who may have more knowledge of the situation. For P2, frustration came from the team's tendency to blame a child's behaviors on "bad parenting". She dealt with this by looking at the whole picture and analyzing the context or situation occurring at home. This helped her to see it as more than bad parenting. Citing an example of her frustration, P2 related a situation when a team labeled a child as emotionally disturbed and blamed bad parenting when really there were psychosocial stressors in the home related to adoption that she felt contributed to the behavior.

Several participants suggested the need to understand the impact of grief on families. A frustration for P3 arose when parents believed that their child's problems were all sensory related, even though behaviors did not improve with sensory intervention. She dealt with this through a team approach sharing that the team must consider denial as a part of the grieving process. She described this as "tiptoeing" around the problem until families were ready to accept the issues at hand. P4 used the term "dancing" around the issue as the

parents worked through grief to come to terms with their child having an emotional disability. She attributed her frustration to the time it takes to get children into services they needed while the team necessarily allowed time for the parents to come to terms with the disability. P6 and P8 recognized that they are sometimes the targets of parent's anger, they realized it was the parent's grieving taking place. This taught P6 to listen to the parents. Over time, she learned to become comfortable with accepting the parents where they are and taking into consideration their situations when she was frustrated. This included considering the parent's cognition, communication skills, and stress they may be under. In addition to recognizing the grieving of parents, P8 sensed that parents felt overwhelmed or had their own mental health issues to deal with. The child's home life could be "out of whack" and she accepted that sometimes she cannot control this. Having a child of her own who has Aspergers disorder, P8 found an increased empathy for parents in regard to the experience of having to attend a meeting with a room full of people delivering bad news. She was able to build on her experience by encouraging parents to speak up. She also provided parents with information that would be useful for advocating for their child. P11 was adamant that the parent was also the client and, therefore, it was essential to engage in the same rapport building and empathizing with the parents as she does with the child. She noted her belief that she had to consider the grieving and frustration of parents, but that she also had to be honest and realistic with the parents regarding their child.

A common occurrence seemed to be frustration with parents not communicating decisions they have made about the treatment of their child's emotional disturbance. P5's frustration came from parents not wanting to use medication for whatever reason, even

though she felt the child really needed it. She commented that at times parents were unrealistic in their expectations for their child. She noted her awareness of dysfunction at home, but she was unsure if the dysfunction of the child led to chaos at home or the chaos at home caused the child's dysfunction. As it wasn't her place to judge that, she focused on analyzing what was occurring and working with what she could. She credited her belief in having empathy for the parent's experience and being willing to compromise for helping her deal with frustrations. P7 referenced the fact that parents sometimes do not communicate that they have stopped a medication and that she is at a disadvantage trying to determine why the child is having such a bad day. When parents reported the medication change later, P7 felt disrespected. P7 felt that her frustration was influenced by her transition from hospital based care where all the facts were right in front of her, to the school system where she doesn't have available every bit of information. She coped with this frustration by reminding herself to consider the parent's experience and by increasing communication with parents, the school team, and community-based teams that served the child. It was essential for P9 to consider how the parents were feeling and what it must be like. For example, "With this boy who is like constantly talking about defecating and fornication and death, you know, satanic rituals and all this stuff. What is this mom supposed to do with that?" The importance of developing a relationship with a parent was illustrated by P10. She shared a situation where a parent perceived the team as judging the parent as a bad parent. In fact, P10 stated the team thought this mother was going above and beyond. Building a relationship with the parents enabled her to be empathetic and understanding of a parent's experience. She builds this relationship over time through inviting parents to sessions, being honest with them, and being consistent with them.

*The Term "Emotional Disturbance" Accompanied by Stigma*

Although the participants all expressed positive attitudes toward working with children who have emotional disturbance, they also expressed the belief that stigma was still associated with the term emotional disturbance. In addition to explicit examples of stigma, there were also implied examples of stigma, one of which was a lack of clarity about what the term actually meant. P11 described emotional disturbance as different for each child. She felt the term represented many diagnoses, but she believed the key was that behavior and emotion had become out of control and in crisis. P10 was unsure of how to define the term saying she felt anxiety would probably go under the IEP category of Other Health Impaired, and if at all possible, the child would be placed under a different category than Emotional Disturbance. She suggested the term might be used with someone with severe behavioral issues or possibly psychiatric diagnoses. P9's experience was that it was a "catch all" category for children who have significant, complex amounts of need. The one common denominator she saw was that they are unmanageable in the classroom. P8 described children with emotional disturbance as those who have emotional or behavioral reactions that are severe for any number of reasons. Emotional disturbance meant children did not relate well to others, might threaten to harm themselves or others, and likely go to alternative schools according to P7. P6 referred to emotional disturbance as depression, bipolar disorder, schizophrenia, or any other psychiatric illness. P5 did not want to use the term, stating instead that all children have emotional issues regardless of the diagnoses. It was noted, though, that in the context of the interview, as she described intervening with children who had emotional disturbance, she shared about children who used self-contained classrooms. P4 felt that most children who had this label were oppositionally defiant, because those with depression usually were still successful in



school. She also believed that students with this label were usually served in a behavioral support classroom versus general education with supports. P3 felt it could involve children with sensory processing issues who had an emotional side, psychiatric issues, and children who had learning disabilities with supplemental emotional issues. P2 did not define the term directly, but described children who ran around the room and tantrumed. She had concerns that these behaviors might be contextual versus chemical, which gave the impression she felt emotional disturbance means diagnoses that have research suggesting they are caused by chemical imbalances in the brain. P1 stated there was a fine line between emotional disturbance and autism spectrum diagnoses and that her district had been working to separate them. She stated, "It's a different reason for their outburst. If it is ED then you may not want to use some of the strategies because you don't want to reward the bad behavior, such a fine line". Later, she described emotional disturbance as children having more medical diagnoses like "ADHD, bipolar, or a neurochemical issue".

When participants were asked to provide examples of diagnoses that might fit under the category of Emotional Disturbance, Aspergers disorder, bipolar disorder, oppositional defiant disorder, attention deficit hyperactivity disorder, obsessive compulsive disorder, schizophrenia, conduct disorders, attachment disorders, children who were substance influenced babies, traumatic brain injury, depression, and anxiety were identified. Although all of these possibilities were given, there was also a tone of debate present about what should and should not belong in the category. P1, P2, P4, and P8 felt Aspergers did not belong under this category, but they had seen it happen. P11 suggested Aspergers as an example of what might be covered under emotional disturbance. P7 said the term emotional disturbance definitely didn't include autism, but she didn't name other

diagnoses she felt belonged. P2 did not provide examples of diagnoses either, but suggested they would be diagnoses that were chemical in nature. P4 felt that oppositional defiant disorders were more likely under this category. P5 cited any diagnoses impacting the brain could be under the category. Although difficulty defining and giving examples of diagnoses does not directly imply stigma, it does indirectly suggest a lack of knowledge about what exactly emotional disturbance means and what types of diagnoses one might see. This lack of knowledge or understanding of emotional disturbance may foster the explicit stigma that was also present.

Participants provided more explicit examples of stigma. P10 felt her school didn't use the term emotional disturbance very often because maybe the parents can't handle it. Likewise, P4 reported that it is very difficult to get an emotional disturbance label in her school; it is easier to get an autism label. Also, P4 described parents changing schools multiple times in an effort to avoid having their child labeled emotionally disturbed. In P3's experience, parents paid "lots of money", hoping sensory intervention would cure the emotional problems in order to avoid the term. P9 described emotional disturbance as a "loaded term" and prefers the term psychosocial issues. She further stated, "No wonder they (parents) don't want their children diagnosed with this, because there is no good side to it. The good side to having your child diagnosed with autism spectrum disorders is you get services." She felt there are not enough answers about what causes the problem or how to fix it. Believing the label was accompanied by self-fulfilling prophecy where teachers expect behavior, P9 noted that the children, in fact, deliver. P3 echoed P9's feeling that it was an abstract term and that emotional disturbance is hard to accept because it cannot be easily cured. P7 described identifying stigma herself when she was scheduled to see a

child labeled emotionally disturbed. She completed a records review of the child which included old evaluations, behavioral incidents, and IEPs and expected this horrible child who scared others. When she went to see him in an alternative program she was amazed because he was doing so well and he wasn't scary. Implying her own stigma, P6 spoke of early experiences in practice when she observed teachers and psychological staff giving up and having a negative attitude towards children with emotional disturbance. P5 suggested a stigma towards children with emotional disturbance when speaking of staff talking about behaviors in front of the children, which she felt was not respectful or helpful. P2 and P3 both raised a concern that the term was one that is associated with parental blame. Due to this concern, P3 felt her district avoided the term. P2 expressed concern about labeling children as emotionally disturbed because of people having a stereotype towards these children, seeing them as unmotivated, and the result of bad parenting. She voiced concern that the label was used when issues are contextual versus pathological. P1 felt her district avoided the term by using Non-categorical Delay until they were absolutely sure.

#### *Rich Experiences Impact Psychosocial Knowledge and Attitudes*

As participants were asked to share experiences that impacted their child psychosocial knowledge and attitudes, it did not seem that any one context facilitated their psychosocial knowledge and attitudes more than another. For example, P4 and P11 felt it was a triad of experiences involving life, academics, and practice. Specifically, P4 felt the academic work laid the foundation, she had an intense immersion in practice, and now she is in a place with continued support. Even so, experiences with the most impact were those that involved rich opportunity to engage with those that had a disability or observe someone engaging with someone who had a disability. The outcomes of these experiences were often feeling more comfortable with people who had mental illness or better

understanding occupational therapy philosophy. Participants did not seem to draw on experiences related to specific knowledge or skills. In fact, even though earlier in the interviews they described a variety of skills such as behavioral strategies, validation therapy, rapport building, and therapeutic use of self that one would assume would be further developed on a mental health fieldwork, several participants (P10, P9, P8, P6, and P2) indicated they had not learned much on their mental health fieldwork that they could use with children. These participants' experiences may have to do with the earlier stated key constituent of a misunderstanding of psychosocial knowledge or there may be difficulty integrating concepts from adult mental health to pediatrics, even though they described many. However, it may just be that to these subjects the most important skill to learn was just being comfortable. The following descriptions provide the reader with further understanding of the participants' rich experiences that they felt impacted their child psychosocial knowledge and attitudes.

Several participants drew from experiences they had in childhood and adolescence. P11 described her experience as a child when she watched her father run a sheltered workshop. She felt he always showed respect for clients by empowering them. P10 shared her experience of working with people who had disabilities since she was in high school. She commented that this had impacted her psychosocial knowledge the most. She watched people and learned what not to do and what to do. For example, while working in a hospital unit for children, one of the children passed away. She explained how a psychologist came in and stood, but did not sit, to be at face level with the children. The children did not respond to the psychologist. She learned the importance of just physically being at a child's level to engage them. Describing herself as an awkward, shy, and a

maladjusted youth who had experience with personal counseling, P9 felt she had drawn from that experience. She also grew up with a parent who had a physical disability whose profession was working with children who had disabilities. She stated these experiences took away any fear, which she felt was important, because children can sense fear. Growing up in a Catholic home and being in the military impacted P7's ability to be structured and consistent with children who have emotional disturbance.

Practice experiences were explained as key to the development of child psychosocial knowledge and attitudes. P9 described a rich experience early in practice when she worked with a boy who was severely dysregulated. Stating that because she didn't know she could quit, she just kept working. The boy later lost his mother, but she saw the impact she had on him as he turned to her for support during this time. P6 felt her psychosocial knowledge and attitudes developed over time. Entering practice feeling ill-equipped, she drew on practice experience. Impacting her most was observing a colleague who had both rich mental health experiences and an appreciation for occupational therapy philosophy. P5 credits her knowledge development to an early practice experience where she worked on a small team with a psychologist, speech therapist, and teacher enabling her to learn from other disciplines. P4 believed that she always had an interest in psychology and this led her to seek employment in mental health occupational therapy. She learned from other disciplines in this setting and felt she learned how to interact with people, set boundaries, and recognize if something is a disease process versus a choice. P2 described her key experience as learning from her adult mental health practice. She learned the importance of talking with children because she did not do this much in her adult practice. Reflecting on that experience, she now she tries to inform children of what is going on.

She believed that her client-centered practice is a reflection of her mental health practice experience. Mental health practice also taught her to listen for what is not being said. P1 felt that she gained most of her knowledge through current practice and the need to know situations. She was asked specifically about her practice in adult mental health, but other than teaching her to look at the complexity of a case; she did not feel it contributed to her child psychosocial knowledge or attitudes. P7 drew from non-occupational therapy employment. She is comfortable communicating with children and parents because of a job that involved sexually transmitted diseases. She stated, "If you have to ask them about their partners you know, you can ask anybody anything."

A few therapists felt having children themselves impacted their child psychosocial knowledge. P8 felt that having a son with Asperger's disorder impacted her psychosocial knowledge the most. It has not only made her seek additional knowledge, but also has helped her to understand how a parent may feel. P6 believed she began to understand the psychosocial issues of children better through having her own children and understanding the importance of knowing a child's psyche, their goals, and values. P11 also commented that she felt she learned the most from her own children.

In regard to mental health fieldwork, P3 felt her adolescent mental health fieldwork experience impacted her most, stating, "I think just feeling comfortable working as an OT for me was the biggest thing from the mental health fieldwork." She described specific skills, such as rapport building, how to communicate, and how to develop trust, as concepts she gained from her fieldwork. P3 was the only participant that had a Level II mental health fieldwork with children and adolescents. When asked to describe impacting experiences, most did not draw directly from mental health fieldwork. Participants were

asked at the conclusion of that section of the interview what they learned from mental health fieldwork that they use in practice today. P11 felt that her mental health fieldwork fostered what she had learned from her father, but it also helped her develop therapeutic use of self and listening skills. P10 felt that given her life experience, her Level I mental health fieldwork did not impact her. P9 wasn't so sure her mental health fieldwork with adults impacted how she works with children other than that she learned about defense mechanisms. She had to deal with one person whose defense was vomiting, which was very difficult for her to tolerate, so now she can handle any defense mechanism from a child. P8 described mental health fieldwork as helping her understand diagnoses and groups, but she did not feel she learned to apply this to children. She wished she would have had an opportunity to work on a children's unit. Mental health fieldwork may have helped P7 learn to use humor with clients, indicating she had a client she saw over and over and she felt using a bit of humor put the client at ease. She also felt it helped her to understand a parent of a child with emotional disturbance because sometimes parents have the same issues. P6 wished her mental health fieldwork was more like a colleague's. She described an experience that was primarily parallel task groups and she had wished for more opportunity to develop communication groups, feelings expression groups, and client-centered goal setting. P5 couldn't really identify how her mental health fieldwork specifically impacted her, other than perhaps communication skills. However, she stated that she knew other therapists who had not had a mental health fieldwork and felt ill-prepared to work with children who have emotional disturbance. P5 indicated that they informed her they wish they would have had a mental health fieldwork. Further supporting P5's conclusion about lack of mental health fieldwork, P4 stated, "I do see that we have

some therapists who, when they're faced with those kinds of challenges, they're more 'I don't have the skills to do that.'" She believed that those who did not have exposure through mental health fieldwork are terrified when it comes to working with these children. P4 specifically stated that mental health fieldwork helped her develop a comfort level so that she does not turn away from psychosocial issues in her practice today. Fieldwork prepared P2 for working with adults, but not children. P1 only completed a Level I fieldwork in mental health and it was actually as a camp counselor and she felt it did not prepare her to deal with children who have emotional disturbance.

One person, P11, referenced the academic setting as a strong contributor to her psychosocial knowledge and attitudes. Interestingly, this experience came from teaching in academia. P11 had the opportunity to teach occupational therapy theory following her own graduation. She felt she gained so much more appreciation for the psychosocial roots of occupational therapy and this greatly impacted how she views the child today. P10 discussed that, although she feels academics could give you the facts and concepts, it would be impossible to expect it to give you the practical skills to intervene with children who have emotional disturbance. This is because each child is different, so this skill is achieved in practice. P9 felt that academia gave her a name for concepts like therapeutic use of self and helped to describe why it works. P2, P6, P8 and P10 felt academic experiences did not train them for psychosocial issues of children. P4, P5, and P10 felt their academic experience impacted their psychosocial knowledge and attitudes because they had psychology degrees. P3 felt she was given information in school, but at the time, did not understand the purpose; it was in fieldwork where it became meaningful. P1



described covering child mental health diagnoses in her academic preparation through case studies.

### **Verification of Interpretation**

Validity in qualitative research is often referred to as credibility (Creswell, 2007). Creswell (2007) suggested several validation strategies that assist the researcher in producing valid and credible work. First, prolonged engagement and persistent observation are essential. It is important to develop trust with the participants, learning their culture, and checking for misinformation. In this study, the researcher was in contact with the participants throughout the researcher process from initially arranging the interview, to checking the original transcription, and sharing the individual interview summaries in order to check for misinformation

The second strategy suggested by Creswell (2007) is triangulation of the data. This occurs through multiple interviews, methods, and investigators. Triangulation was achieved in this study through multiple interviews of school-based occupational therapists across the United States. As well, the researcher's main advisor and one occupational therapy colleague reviewed the data analysis procedures that occurred. Third, peer debriefing or peer review served as an external check of the research process. Both the main adviser and an occupational therapy colleague were used for peer review and debriefing throughout the research process.

The fourth issue, clarifying researcher bias from the outset of the study, allows for the reader to understand any bias and assumptions that may impact the study (Creswell, 2007). In phenomenology, Giorgi and Giorgio (2008) further elaborated that the researcher must "get within the attitude of scientific phenomenological reduction"

(p. 34). Finlay (2008) suggested that the “phenomenological attitude involves a radical transformation in our approach when we strive to suspend presuppositions and go beyond the natural attitude of taken for granted understanding” (p. 3). Corbin and Strauss (2008) and Finlay (2008) suggested that engaging in the process of reflexivity is necessary to establish the phenomenological attitude. The first method of maintaining a non-judgmental attitude was addressed through a list of assumptions provided in Chapter 1. To further address bias through reflexivity, as suggested by Finlay (2002, 2008) and Giorgi and Giorgi (2008), the research engaged in bracketing or “*Epoche*”. The researcher made a conscious effort to journal and dialogue with the main advisor and an occupational therapy colleague to combat bias. In addition, the researcher used Giorgi and Giorgi’s (2008) grid format for data analysis which assisted in combating bias as the grid allowed for transparency in tracking the participants’ original words to data synthesis. As interviews progressed, the researcher reflecting on the spoken word of the individuals, but once analysis of written word through the grid format began it became clear that initial thoughts of the researcher included bias. These biases were set aside because the transparent nature of analysis, through the grid format, did not support these early assumptions and ideas.

Creswell’s (2007) fifth recommendation for establishing credibility was member checking. Member checking occurred in this study through returning original transcriptions to the participants. Participants were asked to review the transcript and correct any misinformation or clarify a statement they provided in the initial interview. A deadline for request for changes to the transcript was provided. Three participants responded with clarification regarding a statement they made and 3 participants responded to verify that the transcript was accurate (Appendix M). Member checking then occurred

when the individual interview summaries were developed. Members were again asked to verify factual information and comment on agreement with the interview summary (Appendix N). All 11 participants responded to the request for verification of the individual interview summaries. Four participants clarified statements they had made. The remaining participants verified that the interview summary was an accurate interpretation of the interview. Finally, to address transferability of the findings, Creswell (2007) and Geertz (1973) recommended using thick and rich description to report the study findings.

Polkinghorne (1989) further suggested that validation in phenomenology means the idea is well grounded and supported. Polkinghorne (1989) suggested that the researcher address five issues related to validity. First, be sure the researcher has not influenced the participants' descriptions. In order to not influence participant's descriptions, two broad questions were asked and participants were asked to describe their experiences. At times participants did make comments to the nature, "is that what you are looking for" and the researcher responded, "Whatever it means to you is what I am looking for". Second, be sure transcription is accurate. Because a transcriptionist had been hired, but was only able to transcribe half of the interviews, the researcher completed the transcription of the second half of the interviews. To ensure accurate transcription, the researcher replayed all audio recording while reading the completed transcription. They were then sent to the participants to verify prior to analysis. Third, when the data are reviewed by a peer reviewer, are there other conclusions that could be made, and if so, does the researcher identify these possibilities? The researcher provided the data analysis to the main advisor and occupational colleague for their review who provided feedback regarding any other

potential possibilities in interpretation. Feedback from the main advisor and occupational colleague were incorporated into the data analysis and findings. Fourth, be sure that it is possible to go from a general structural description to the transcription to account for connections. The researcher believes that this was addressed through using the grid format outlined by Giorgi and Giorgi (2008) which easily allows for tracing of the general structure and key constituents back to the original statements of the participants. Finally, is the structural description specific to the situation? Again, the main advisor and an occupational therapy colleague reviewed the structural description to ensure that it was specific to the situation of school-based occupational therapists.

Reliability, often referred to as dependability in qualitative research, can be addressed through a variety of ways (Creswell, 2007). This researcher addressed reliability first through quality audio recording of the interviews along with allowing the participants to review the transcribed interview for opportunity to correct or elaborate on something in the interview.

### **Quantitative Findings**

Quantitative methods will be used to answer the following research questions:

(a) What level of general child psychosocial knowledge do school-based occupational therapists currently possess? (b) What are the attitudes of school-based occupational therapists toward children with emotional disturbance? (c) How does the level of general child psychosocial knowledge and attitudes of school-based occupational therapists compare to teachers' general child psychosocial knowledge and attitudes? (d) Is there a difference in knowledge and attitudes based upon level of preparation (bachelors, masters, or doctoral)? (e) Is there a relationship between the level of general knowledge or attitudes

and the level of specific child mental health course content in therapists' academic curriculum? (f) Is there a difference in knowledge and attitudes between therapists who completed mental health fieldwork and those who did not? (g) Is there a relationship between the level of general knowledge or attitudes and the incorporation of psychosocial knowledge into non-mental health fieldwork? (h) Is there a relationship between general knowledge or attitudes, and continuing education courses specific to mental health since graduating? (i) Is there a relationship between general knowledge or attitudes and practice experiences with children who have emotional disturbance?

### **Instrument Analysis**

Because the original instrument developed by Morris (2002) was used with teachers, the validity and reliability of the instrument with school-based occupational therapists was evaluated using factor analysis. Field (2006) indicated that it does not matter whether or not reverse scoring is completed prior to factor analysis. However, to be consistent with Morris's (2002) approach to analysis, prior to analyzing the component structure of the instrument, questions 4, 5, 6, 7, 10, 12, 14, 15, 19, 30, 31, 32, 33, 37, 38, 39, and 40 were reverse scored to adjust those items that had been stated to require a negative answer (Morris, 2002). After the reverse scoring, the analysis to verify the original constructs of knowledge and attitudes as identified by Morris (2002) began using SPSS. Bartlett's test of sphericity, which examines the hypothesis that the correlations in the correlation matrix are zero, was performed (Field, 2006). To address sampling adequacy, the Kaiser-Meyer-Olkin (KMO) measure was utilized (Field, 2006). The KMO "represents the ratio of the squared correlation between variables to the squared partial correlation between variables" (Field, 2006, p. 640). Results are presented in Table 3.

Table 3. KMO and Bartlett's Test

|   |                    |         |
|---|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy |                    | .698    |
| Bartlett's Test of Sphericity                   | Approx. Chi-Square | 2675.67 |
|   | Df                 | 780.00  |
|   | Sig.               | < .001  |

Bartlett's test significance of  $p < .001$  suggests that there are some relationships between variables and that the data are appropriate for factor analysis. Field (2006) noted that methods for determining sample adequacy for factor analysis have been debated.

Although the general rule of thumb is that 10 respondents per item on the instrument should be obtained, there is no empirical basis for this argument. Comrey and Lee (1992) suggested that 1000 was an excellent sample size, 300 a good sample size, and 100 a poor sample size when looking at factor analysis. If the general rule of thumb or Comrey and Lee's (1992) suggestion were followed, the sample in this study would be of adequate size for factor analysis as the instrument consisted of 40 items with a response of  $N = 630$ .

Field (2006) suggested that the KMO measure of sampling adequacy be used as an additional method of examining sample adequacy. Field (2006) reported that values between .5 and .7 are mediocre and scores between .7 and .8 are good. The observed value is very close to the boundary between mediocre and good given by Field (2006). For the original instrument, Morris (2002) had a sample size of  $N = 254$ ; therefore, he used the KMO measure of sampling adequacy and obtained a value of .681. Morris (2002) reported that values of .6 and above are required for good factor analysis.

Once data were determined suitable, principal component analysis was used to develop an initial solution for the component structure. The results indicated that 15

factors had eigenvalues over 1.0. However, the percent of variance explained by a particular component decreased substantially after two components (Table 4).

Table 4. Total Variance Explained

| Component | Initial Eigenvalues |               | Extraction Sums of Squared Loadings |       |               |              |
|-----------|---------------------|---------------|-------------------------------------|-------|---------------|--------------|
|           | Total               | % of Variance | Cumulative %                        | Total | % of Variance | Cumulative % |
| 1         | 3.56                | 8.89          | 8.89                                | 3.56  | 8.89          | 8.89         |
| 2         | 2.85                | 7.13          | 16.03                               | 2.85  | 7.13          | 16.03        |
| 3         | 1.69                | 4.22          | 20.24                               | 1.69  | 4.22          | 20.24        |

Field (2006) suggested that the scree plot is a reliable criterion in factor selection when the sample has more than 200 participants. The scree plot demonstrates that the sharp descent part of the plot accounts for two factors (See Figure 1).

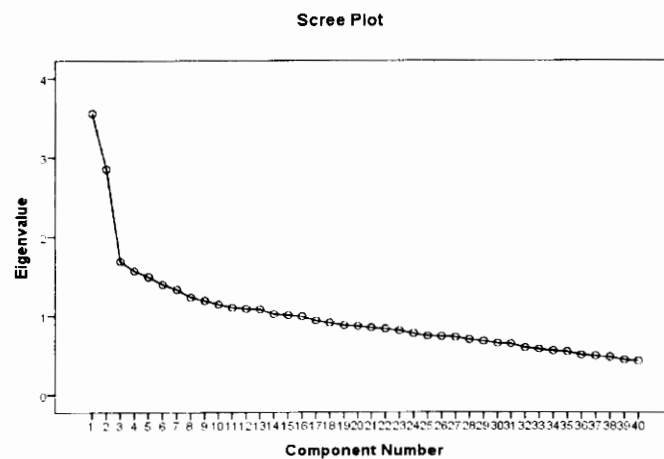


Figure 1. Scree Plot of Components

The percent of variance matrix and scree plot support a two factor solution. A two factor solution is also supported by the a priori two factor solution proposed in the original instrument (Morris, 2002). Therefore, the analysis proceeded with a second principal component analysis using a two-factor varimax rotated solution.

Inspection of the second principal component analysis did not reveal the same results as Morris (2002). Appendix O provides the first rotated component matrix based

on two factors. Field (2006) suggested that loadings with absolute values of more than .3 are important. In reviewing the factor loadings, 17 knowledge items loaded on component one, the knowledge construct, as compared to Morris's (2002) 26. Of these, 12 items loaded above .3. Component one also contained two attitude items, both of which loaded below the .3 level. Component two contained 8 knowledge items and 12 attitude items. Four of the knowledge items loaded higher than the .3 level. Of the 12 attitude items, 10 loaded above the .3 level. One item loaded evenly on components one and two. Results of the analysis suggested that the instrument, as a whole, is not valid when used with school-based occupational therapists.

Although the original instrument used KMO, Bartlett's test of sphericity, factor analysis, and reliability procedures to demonstrate that it was reliable and valid; it still was not a strong instrument. In retrospect, had the researcher known more about the details of factor analysis she might have seen the more detailed red flags that would have discouraged the use of the instrument. This barrier led to some reflection on how to proceed. Essentially, there were three options for continuing the research. The first option was to assume that the original two-factor structure was correct and proceed with the study. Choosing this method would have suggested that there was something wrong with the sample obtained for this study. This seemed unlikely given that the sample was random with a return of  $N = 630$  out of 1,000, significantly more than Morris's (2002) sample of  $N = 254$ . The second option was to reevaluate how many factors may be present in the instrument, select the two factors that most closely resemble the knowledge and attitude constructs proposed by Morris (2002) and disregard the other items at this time. The third option was to determine how many factors were present in the instrument and



then proceed to develop a new instrument by interpreting each of the resulting factors. To make this decision, the researcher returned to the goals of the study, which were to use the instrument to answer the research questions related to knowledge and attitudes of school-based occupational therapists. Although developing a new instrument was out of the scope of the mixed-methods study, the researcher did consider this option. Unfortunately, once the number of factors present was determined and items were reviewed, the instrument was difficult to interpret. Therefore, the analysis continued by reexamining how many factors were present and selecting the two factors that most closely resembled Morris's (2002) original constructs of knowledge and attitude.

Neither the scree plot nor the eigenvalues proved to be an effective means of determining the relevant number of factors present in the data. O'Conner (2000) suggested an alternative method based on the statistical technique of parallel analysis. Parallel analysis "involves extracting eigenvalues from random data sets that parallel the actual data set with regard to the number of cases and variables" (O'Conner, 2000, p. 397). Eigenvalues from the actual original data set are compared to the eigenvalues derived from the random data set. According to O'Conner (2000), "factors or components are retained as long as the *i*th eigenvalue from the actual data is greater than the *i*th eigenvalue from the random data" (p. 397). In this case, seven factors were retained. Appendix P contains the parallel analysis.

Seven factors were then extracted and rotated using principal component analysis and varimax rotation. The seven component solution accounted for 34.69% of the variance (Table 5). The resulting rotated component matrix revealed that components one and two were consistent with Morris's (2002) knowledge and attitude constructs. Components one

and two accounted for 16.03% of the variance (Table 5). Items 1, 2, 3, 11, 16, 20, 21, 22, 34, and 35 loaded on component one. All items were knowledge items on the original instrument. Items loaded between .325-.567. Items 13, 15, 19, 27, 32, 37, 38, and 40 loaded on component two. All items were attitude items on the original instrument. Items loaded between absolute values .389-.672. Appendix Q provides the rotated component matrix.

Table 5. Total Variance Explained - 7 Component Solution

| Component | Initial Eigenvalues |               | Extraction Sums of Squared Loadings |       |               |              |
|-----------|---------------------|---------------|-------------------------------------|-------|---------------|--------------|
|           | Total               | % of Variance | Cumulative %                        | Total | % of Variance | Cumulative % |
| 1         | 3.56                | 8.89          | 8.89                                | 3.56  | 8.89          | 8.89         |
| 2         | 2.85                | 7.13          | 16.03                               | 2.85  | 7.13          | 16.03        |
| 3         | 1.69                | 4.22          | 20.24                               | 1.69  | 4.22          | 20.24        |
| 4         | 1.57                | 3.91          | 24.15                               | 1.57  | 3.91          | 24.15        |
| 5         | 1.49                | 3.72          | 27.88                               | 1.49  | 3.72          | 27.88        |
| 6         | 1.40                | 3.49          | 31.36                               | 1.40  | 3.49          | 31.36        |
| 7         | 1.33                | 3.33          | 34.69                               | 1.33  | 3.33          | 34.69        |

Reliability of the two components was then assessed using Cronbach's Alpha. The knowledge component was analyzed and revealed a Cronbach's Alpha of .612. Items were then analyzed individually to see if removing any item would improve the reliability of the component. No items were found to negatively impact the overall reliability of the component; therefore, all 10 items were retained. The reliability of the attitude component initially revealed negative covariances among items, suggesting a violation of the reliability model assumptions. Items had been reverse scored prior to the beginning of factor analysis; therefore, Morris's (2002) work was consulted and Morris found the same occurrence when calculating reliability for the attitude scale. Keeping consistent with Morris, the items were then recoded into the original direction and that procedure resulted in a Cronbach's Alpha of .548. Items were then analyzed individually to see if removing

any item would improve the reliability of the component. Item 37 was found to negatively impact the reliability; therefore it was removed from the component, resulting in a Cronbach Alpha of .578 for seven items. Field (2006) suggested that anytime items are removed, the factor analysis should be re-run to verify that the components remain intact. Analysis was re-run revealing no changes to the components. Although Field (2006) suggested that in social sciences coefficient alpha levels may be lower than .7 and still acceptable, it is noted that again, the reliability of the scales is a limitation of the instrument.

The final outcome of the analysis revealed a knowledge component consisting of 10 items and the attitude component consisting of 7 items. The knowledge component includes items 1, 2, 3, 11, 16, 20, 21, 22, 34, and 35. The attitude component includes items 13, 15, 19, 27, 32, 38, and 40. Appendix R contains the final items, factor loadings, mean scores, and standard deviations.

### **Descriptive Statistics for Scales**

Prior to answering the research questions, the data were analyzed to assess for normal distribution. Because the knowledge scale consisted of 10 items and the attitude scale 7 items, it was believed that nonresponse to any of those items would skew the scaled scores. Therefore, all cases that contained a nonresponse on one or more items were removed. Field (2006) suggested that with samples over 200 it is more important to look at the shape of the distribution visually to determine normal distribution of the data. Appendix S contains the histograms for both scales. A review of the histograms suggests normal distribution. Table 6 provides the descriptive statistics for the knowledge scale and attitude scale.

Table 6. Descriptive Statistics for Scales

|                      | Knowledge | Attitude |
|----------------------|-----------|----------|
| N                    | 584       | 584      |
| Mean                 | 41.83     | 21.28    |
| SD                   | 3.21      | 2.42     |
| Variance             | 10.30     | 5.88     |
| Skewness             | -.005     | -.061    |
| SE Skewness          | .101      | .101     |
| Kurtosis             | -.173     | .184     |
| SE Kurtosis          | .202      | .202     |
| Range                | 17        | 16       |
| Minimum              | 33        | 13       |
| Maximum              | 50        | 29       |
| Total Score Possible | 50        | 35       |

### Research Questions With Corresponding Tables

For the purpose of analyzing data to answer the research questions, items were left in the original direction to be consistent with what was required to compute the Cronbach Alpha. Originally, Morris (2002) called for reverse scoring attitude items 15, 19, 32, 38, and 40. This decision impacted the attitude scale only, as the knowledge scale did not have items that required reverse scoring.

Table 7 presents the data analysis for research question one: What level of general child psychosocial knowledge do school-based occupational therapists currently possess?

Items on the knowledge scale included: (Q1) "Cultural differences account for some variations in childhood behavior", (Q2) "People with attention-deficit/hyperactivity disorder (ADHD) have changes in behavior and thinking", (Q3) "Children (K-6) with epilepsy carefully controlled by medication can perform as well in school as their peers", (Q11) "Many psychiatric conditions are due to biochemical imbalances in the brain", (Q16) "Thorough assessments for children (K-6) with mental illness consider strengths and needs, as well as deficits", (Q20) "Stammering or stuttering may be due to emotional

Table 7. Descriptive Statistics for Knowledge Scale (N= 584)

|           | Mean  | SD   | Minimum | Maximum |
|-----------|-------|------|---------|---------|
| Knowledge | 41.83 | 3.21 | 33      | 50      |
| Q1        | 4.27  | .59  | 1       | 5       |
| Q2        | 4.21  | .65  | 1       | 5       |
| Q3        | 4.22  | .76  | 1       | 5       |
| Q11       | 4.13  | .76  | 1       | 5       |
| Q16       | 4.36  | .86  | 1       | 5       |
| Q20       | 3.76  | .71  | 1       | 5       |
| Q21       | 4.14  | .51  | 1       | 5       |
| Q22       | 4.60  | .61  | 1       | 5       |
| Q34       | 4.24  | .63  | 1       | 5       |
| Q35       | 3.89  | .70  | 1       | 5       |

reasons”, (Q21) “Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impair functioning”, (Q22) “There is no “one size fits all” treatment for mental disorders”, (Q34) “A tic is a sudden, recurrent, stereotyped motor movement or vocalization”, (Q35) “Children (K-6) with an oppositional defiant disorder have a pattern of negativistic and hostile behavior lasting at least 6 months”. Participant responses suggest that school-based occupational therapists do have child psychosocial knowledge (Mean = 41.82; SD = 3.21; Highest Score Possible for Knowledge Scale (perfect knowledge) = 50).

Table 8 presents the data for research question two: What are the attitudes of school-based occupational therapists toward children with emotional disturbance?

Items on the attitude scale included: (Q13) “Schools cannot afford to pay for the mental health services that children need”, (Q15) “Other elementary (K-6) students need to be protected from peers with mental illness”, (Q19) “Mental health workers fail to hold children (K-6) accountable for their behavior”, (Q27) “Occupational therapists are not paid enough to have to teach children with mental illness”, (Q32) “Children (K-6) with mental illness are frightening to other students”, (Q38) “Occupational therapists need to be careful

Table 8. Descriptive Statistics for Attitude Scale (N= 584)

|                | Mean  | SD   | Minimum | Maximum |
|----------------|-------|------|---------|---------|
| Attitude Scale | 18.84 | 3.50 | 7       | 30      |
| Q13            | 3.23  | 1.13 | 1       | 5       |
| Q15            | 2.65  | 1.03 | 1       | 5       |
| Q19            | 2.47  | .75  | 1       | 5       |
| Q27            | 1.83  | .88  | 1       | 5       |
| Q32            | 3.00  | .82  | 1       | 5       |
| Q38            | 3.48  | .84  | 1       | 5       |
| Q40            | 2.18  | 1.12 | 1       | 5       |

what they say around students with mental illness”, (Q40) “Occupational therapists are asked to teach some children who should not even be in public school”. Items on the attitude scale are more difficult to interpret. Five items (15, 19, 32, 38, & 40) that were originally meant to be reversed scored were not reversed scored to be consistent with how the Cronbach Alpha was calculated. In addition, on the initial factor analysis, the two items that were not reversed scored (13 and 27) loaded negatively suggesting that this population may have responded differently than Morris’s (2002) participants. In essence, in this study it appeared that items 13 and 27 were also items that solicited negative responses. The mean scale score was 18.84 (SD = 3.50; Highest Possible Score on Attitude Scale 35), suggesting that school-based occupational therapists have a somewhat neutral attitude toward children with emotional disturbance. Three items (13, 32, & 38) suggested a neutral attitude. Four items (15, 19, 27, & 40) suggested a negative attitude; however, these items were items that were not reversed scored, but appear to be soliciting negative responses. For example, item 27 stated, “occupational therapists are not paid enough to have to teach children with mental illness” and the resulting mean score for the item was 1.83 (SD = .78) suggesting that participants strongly disagreed with this statement. Strongly disagreeing, in this instance, appears to support a more positive

attitude. Item 19, “mental health workers fail to hold children accountable for their behavior” had a mean score of 2.47 (SD = .75) also suggested respondents disagreed with the statement. Again, a disagree answer would suggest a more positive attitude. Therefore, lower scores on the attitude scale may suggest a more positive attitude toward children with emotional disturbance.

Given that the original knowledge scale (25 items) and attitude scale (15 items) were not used to analyze school-based occupational therapists’ child psychosocial knowledge and attitudes, research question three will not be answered. The question was “how does the level of general child psychosocial knowledge and attitudes of school-based occupational therapists compare to teachers’ general child psychosocial knowledge and attitudes?”

Research question four stated: “Is there a difference in knowledge and attitudes based upon level of preparation (bachelors, masters, or doctoral)? Separate one-way analysis of variance were conducted to determine if level of preparation influenced the separate components, knowledge and attitudes. Levene’s procedure was examined to test the assumption of equality of variance for an ANOVA. Table 9 provides Levene’s test of equality of error variance which suggests that variances are not significantly different and the assumption of constant variance required to compute an ANOVA is present. Table 10 provides the group statistics for education level.

Table 9. Levene’s Test of Equality of Error Variances

|           | F     | Df1 | Df2 | Sig. |
|-----------|-------|-----|-----|------|
| Knowledge | .257  | 2   | 581 | .774 |
| Attitude  | 1.547 | 2   | 581 | .214 |

Table 10. Group Statistics for Education Level

|           | Bachelors |       |      | Masters |       |      | Doctorate |       |      |
|-----------|-----------|-------|------|---------|-------|------|-----------|-------|------|
|           | N         | M     | SD   | N       | M     | SD   | N         | M     | SD   |
| Knowledge | 268       | 41.65 | 3.20 | 304     | 41.92 | 3.21 | 12        | 43.33 | 3.20 |
| Attitude  | 268       | 19.19 | 3.60 | 304     | 18.52 | 3.36 | 12        | 19.42 | 4.01 |

The ANOVA was not significant,  $F(2, 581) = 1.87, p = .115$  for the knowledge scale suggesting there is not a significant difference in general child psychosocial knowledge based upon level of academic preparation. The ANOVA was not significant,  $F(2, 581) = 2.83, p = .06$  for the attitude scale suggesting there is not a significant difference in attitude toward children with emotional disturbance based upon level of academic preparation.

Table 11 presents the data for research question five: Is there a relationship between the level of general knowledge or attitudes and the level of specific child mental health course content in therapists' academic curriculum?

Table 11. Correlations Between Knowledge and Attitude Scales and Course Content

|                           | Level of child mental health course content |
|---------------------------|---|
| Knowledge Scale (N = 583) | .032  |
| Attitude Scale (N = 583)  | -.106*                                      |

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

The results of the correlation analysis presented in Table 11 show that the correlation of knowledge and level of child mental health course content was not statistically significant. The correlation of attitude with level of child mental health course content was statistically significant and negative. The negative correlation reflects that lower scores on the attitude scale likely mean more positive attitudes in the case of this instrument. Therefore, if therapists reported higher levels of child mental health course content they tended to have more positive attitudes. Even though the results show a statistically significant correlation, it should be viewed with caution. Given the large



sample size, the power to detect differences from 0 is very high. Green and Salkind (2008) suggest that in the behavioral sciences, correlation coefficients of .1 are small, .3 medium, and .5 large. The attitude correlation of  $-.106$  is small suggesting that it is not a strong correlation.

Research question six stated: "Is there a difference in knowledge and attitudes between therapists who completed a mental health fieldwork and those who did not? Separate independent samples *t*-tests were conducted to determine if completion of a mental health fieldwork influenced the separate components, knowledge and attitudes. Levene's procedure was examined to test the assumption of equality of variance for a *t*-test. Table 12 provides Levene's test of equality of error variance and confirms the suitability of the data for *t*-tests. Table 13 provides the group statistics for mental health fieldwork.

Table 12. Levene's Test of Equality of Error Variances for Mental Health Fieldwork

|                 | F    | Sig. |
|-----------------|------|------|
| Knowledge Scale | .729 | .93  |
| Attitude Scale  | .316 | .574 |

Table 13. Group Statistics for Mental Health Fieldwork

| Scale     | Mental Health Fieldwork |       |      |         | No Mental Health Fieldwork |       |      |         |
|-----------|-------------------------|-------|------|---------|----------------------------|-------|------|---------|
|           | N                       | M     | SD   | SE Mean | N                          | M     | SD   | SE Mean |
| Knowledge | 527                     | 41.89 | 3.19 | .14     | 55                         | 41.24 | 3.38 | .46     |
| Attitude  | 527                     | 18.86 | 3.48 | .15     | 55                         | 18.67 | 3.71 | .50     |

An independent samples *t* test was conducted to evaluate whether or not completing a mental health fieldwork had an impact on general psychosocial knowledge and attitudes. The test for knowledge was not significant,  $t(580) = 1.45, p = .148$ . The test for attitude was not significant,  $t(580) = .376, p = .707$ . These results suggest that completing mental

health fieldwork did not have a statistically significant impact on child psychosocial knowledge or attitudes.

Table 14 presents the data for research question seven: Is there a relationship between the level of general knowledge or attitudes and the incorporation of psychosocial knowledge into non-mental health fieldwork?

Table 14. Correlations Between Knowledge and Attitude Scales and Psychosocial Knowledge Into Non-mental Health Fieldwork

|                           | Psychosocial Knowledge Into<br>Non-mental Health Fieldwork |
|---------------------------|--|
| Knowledge Scale ( N= 584) | .18**  |
| Attitude Scale (N = 584)  | -.094*   |

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

\*\*Correlation is significant at the 0.01 level (2-tailed)

The results of the correlation analysis presented in Table 14 show that correlation of knowledge with level of incorporation of psychosocial knowledge into non-mental health fieldwork was statistically significant and positive. In general, therapists who reported higher levels of incorporation of psychosocial knowledge into non-mental health fieldwork had higher levels of child psychosocial knowledge. The correlation of attitude with level of incorporation of psychosocial knowledge into non-mental health fieldwork was statistically significant and negative. The negative correlation reflects that lower scores on the attitude scale likely mean more positive attitudes, suggesting that therapists who reported higher levels of incorporation of psychosocial knowledge into non-mental health fieldwork had more positive attitudes toward children with emotional disturbance. Even though the results show statistically significant correlations, they should be viewed with caution. Given the large sample size, the power to detect differences from 0 is very high. Also, the correlations themselves are small suggesting that it is not a strong correlation.

Table 15 presents the data for research question eight: Is there a relationship between the level of general knowledge or attitudes and continuing education courses specific to mental health since graduating?

Table 15. Correlations Between Knowledge and Attitude Scales and Mental Health Continuing Education

|                           | Level of Mental Health |
|---------------------------|------------------------|
| Knowledge Scale ( N= 583) | .105*                  |
| Attitude Scale (N = 583)  | -.119**                |

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

\*\*Correlation is significant at the 0.01 level (2- tailed)

The results of the correlation analysis presented in Table 15 show that the correlation of knowledge level and mental health continuing education level was statistically significant and positive. In general, therapists who reported higher levels of mental health continuing education had higher levels of child psychosocial knowledge. The correlation of attitude level and mental health continuing education level were statistically significant and negative. The negative correlation indicates that lower scores on the attitude scale likely mean more positive attitudes, suggesting that therapists who reported higher levels of mental health continuing education had more positive attitudes toward children with emotional disturbance. Even though the results show a statistically significant correlation, it should be viewed with caution. Given the large sample size, the power to detect differences from 0 is very high. Also, the correlation itself is small suggesting that it is not a strong correlation.

Table 16 presents the data for research question nine: Is there a relationship between the level of general knowledge or attitudes and practice experiences with children who have emotional disturbance?

Table 16. Correlations Between Knowledge and Attitude Scales and Practice Experience

|                           | Level of Practice Experience |
|---------------------------|------------------------------|
| Knowledge Scale ( N= 583) | .160**                       |
| Attitude Scale (N = 583)  | -.127**                      |

\*\*Correlation is significant at the 0.01 level (2- tailed)

The results of the correlation analysis presented in Table 16 show that the correlation of knowledge and level of practice experience with children who have emotional disturbance was statistically significant and positive. In general, therapists who reported more practice experiences with children who have emotional disturbance tended to have higher levels of child psychosocial knowledge. The correlation of attitude and level of practice experience with children who have emotional disturbance was statistically significant and negative. The negative correlation indicates that lower scores on the attitude scale likely mean more positive attitudes, suggesting that therapists who reported higher levels of practice experiences with children who have emotional disturbance had more positive attitudes toward children with emotional disturbance. Even though the results show a statistically significant correlation, it should be viewed with caution. Given the large sample size, the power to detect differences from 0 is very high. Also, the correlations themselves are small suggesting that it is not a strong correlation.

## CHAPTER V. DISCUSSION, SUMMARY, AND CONCLUSIONS

This chapter will present a discussion of the qualitative and quantitative portions of the study along with relevant literature. Summary of the research conducted along with conclusions will be presented. Implications of the findings and recommendations for occupational therapy education and practice will be made. Limitations of the study will be presented. Personal reflections of the research process will conclude the chapter.

### **Mixed Methods Data Analysis Discussion**

Consistent with the convergence model of triangulation design, the qualitative and quantitative data were presented separately and now will be converged through comparing and contrasting the data sets. The following questions used to guide the mixed-methods data analysis are based upon Creswell and Plano Clark's (2007) suggestions for completing mixed-methods data analysis using the convergence model: (a) To what extent do the quantitative and qualitative data converge? (b) How do they converge and why might this be? (c) To what extent do the same types of data confirm each other? (d) To what extent do the key constituents and general structure support the survey results? (e) What similarities and differences exist between phenomenological findings and the survey findings?

As intended in the design of the study, the qualitative and quantitative data sets complemented each other. For example, although the quantitative instrument provided a number or level of general knowledge, the qualitative study revealed knowledge that school-based therapists use in practice. The results are organized in accordance with the variables addressed in the study, school-based occupational therapists' psychosocial knowledge and attitudes.

### **School-based Occupational Therapists' Psychosocial Knowledge**

Quantitative results suggested that school-based occupational therapists have a basic understanding of child psychosocial knowledge when it comes to understanding diagnostic criteria, etiology, and basic considerations for intervention. Although the quantitative results measured basic knowledge, the qualitative findings showed that therapists focused on intervention strategies versus knowledge of diagnostic criteria and etiology. The qualitative results provided a more in depth understanding of the school-based therapists' knowledge base.

Discussion of diagnostic criteria focused mainly on the meaning of emotional disturbance. Emotional disturbance is a term coined through IDEA (2004) and not a term used in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association [DSM-IV-TR], 2000). Participants were aware of the term emotional disturbance, but, their understanding of that term varied significantly. One participant suggested it was a "catch all" term for children who have significant, complex amounts of need. Another participant suggested that conditions covered under emotional disturbance were chemical in nature. Participants did not fully agree on the types of diagnoses that belonged under the category emotional disturbance. Some stated only children with oppositional defiant disorder while others suggested children with bipolar, Asperger's disorder, ADHD, and schizophrenia. Therapists interviewed for the study practiced in different areas of the country, which may be impacting how the term is interpreted or used. Even so, the term is stated in federal law (IDEA, 2004) which raises questions about adequate understanding of the term. However, this may be a reflection of the application of the term by the school district where the therapist works and not the therapist's own

interpretation of the term. Also evident in the qualitative findings was that school-based occupational therapists appeared to have more knowledge about autism and its diagnostic criteria and etiology. Some participants suggested that autism is not a mental health disorder because it is a neurodevelopmental condition. Participants in the qualitative portion of the study seemed to lack an understanding of etiology of other DSM-IV-TR conditions, or even the research that is being done to better understand etiology in mental health diagnoses.

As mentioned earlier, the qualitative findings highlighted what type of child psychosocial knowledge is most important to the participants in the qualitative portion of the study, psychosocial intervention strategies. Psychosocial intervention strategies used by occupational therapists were not measured on the quantitative instrument. Therefore, the data sets complemented each other well as an understanding of what psychosocial knowledge is used in practice was gained.

One noteworthy finding of the qualitative portion of the study was the uncertainty about the term “psychosocial knowledge”. If participants were asked directly to tell about the development of their psychosocial knowledge, they struggled to answer the question. If they were asked to describe a case scenario of working with a child, they would present all kinds of psychosocial knowledge, particularly as it related to intervention strategies (i.e., therapeutic use of self, activity analysis, behavioral principles, modeling). In fact, three participants were asked, “What is psychosocial knowledge or skills to you?” They responded that they had hoped the researcher wasn’t going to ask that because they were not sure what it meant. In fact, when participants did provide definitions, they first provided a definition of the term psychosocial, which seemed to be what was puzzling to

them. This finding is important because the profession of occupational therapy has called for occupational therapy to return to its psychosocial roots through the provision of holistic care which includes the application of psychosocial knowledge (AOTA, 2007a; AOTA 2009a; Kielhofner, 2009b; Moyers, 2007). Participants provided definitions consistent with the occupational therapy profession, suggesting that they do understand, but are uncomfortable expressing the meaning. One participant defined it as the psychological, cognitive, emotional, inter-relational aspects of one's self that gives us who we are. This is consistent with AOTA's (2004) definition of psychosocial which includes, "the intrapersonal, interpersonal, and social experiences and interactions that influence occupational behavior and development" (p. 669).

Given that participants in the qualitative portion of the study were unsure of a definition of psychosocial knowledge, yet provided an appropriate definition when asked, the issue may be understanding what it means to use psychosocial knowledge in practice. Furthermore, what does psychosocial knowledge look like in school-based practice versus community mental health practice? In fact, participants even raised the concern that they worried that application of psychosocial knowledge meant to counsel people. Participants were unsure about how they were supposed to use psychosocial knowledge in their school-based practice.

Even so, the use of psychosocial knowledge in practice is quite apparent as the participants defined psychosocial intervention strategies they use. Table 17 presents the school-based occupational therapists' psychosocial intervention strategies as discussed in the key constituents section of this study. The psychosocial intervention strategies represent the psychosocial knowledge that school-based therapists are using in their



practice. The table also provides a definition of the strategy based upon literature and a participant example.

Table 17. The School-based Occupational Therapists' Psychosocial Intervention Strategies (as discussed in the findings section of this study)

| Term  | Literature Definition  | Participant Example  |
|---|--|--|
| Sensory strategies<br>(All 11 participants)                               | Strategies based on theories of sensory processing and sensory integration. Examples include therapy ball chairs, weighted vests, and fidgets. (Bagatell, Mirigliani, Patterson, Reyes, & Test, 2010). Strategies are designed to maintain arousal states by providing children with sensory input needed to respond more effectively to environmental challenges (Dunn, 2008; Williams and Shellenberger, 1996) | Weighted products, seating device, swings, heavy work activities, sensory breaks for preventing behaviors, and removing environmental stimuli                                |
| Activity/task analysis<br>(All 11 participants)                           | "Process used by occupational therapy practitioners to understand the demands that a specific desired activity places on a client" (AOTA, 2008c, p. 651).  | Activity analysis was used to analyze the task and find the one step the child could successfully accomplish.  |
| Identifying occupations of interest to the child<br>(All 11 participants) | Occupational therapy intervention plans are driven by the client's goals and values. Problems are addressed by selecting occupations of interest to the child (AOTA, 2008c).   | The problem area of poor fine motor skills was addressed through puppet making instead of just completing a rote task, such as writing his/her name or manipulating pennies. |
| Behavioral principles<br>(All 11 participants)                            | "Effective techniques for shaping behavior and teaching new skills" (Watling & Schwartz, 2004, p. 113). Behavioral principles include understanding antecedents,   | Behavioral plans (token economies), using positive reinforcements, Applied Behavioral Analysis. One practice example was rewarding   |

Table 17. (continued)

|   |   |  |
|---|---|--|
|   | consequences to behaviors, and applying positive reinforcement.   | the child by allowing them to play catch after each step of an activity.   |
| Strategies to prevent behavior<br>(All 11 participants) | Antecedent approaches to decrease the occurrence of behaviors, such as environmental conditions or a sequence of events (Rhode, Jenson, & Reavis, 1996). Further examples include structure, consistency, and schedules (Nielsen & Watling, 2010) | Preventative strategies mentioned by participants included schedules, structure, and consistency within the intervention session. Following the same schedule each session was found to be effective for several participants. |
| Modeling<br>(P5,6,8)                                    | “Modeling is a form of teaching by example” (Cole & Tufano, 2008, p. 150). Modeling is based on Bandura’s Social Learning Theory.   | Participants modeled for a child by showing them that they also get angry and need to use coping skills  |
| Visuals<br>(P1,2,4,5,7,8)                               | Visual schedules involved pictures ordered in a sequential manner. Schedules are then used to structure the day. Schedules aid the child in knowing what to do and when they should do it (Watling, 2001).  | Visual session schedules for children with autism. Visual cue cards to aid the child in managing emotions, especially when they are so overwhelmed they cannot speak.  |
| Therapeutic use of self<br>(All 11 participants)        | The therapists “planned use of his or her personality, insights, perceptions, and judgments as part of the therapeutic process” (Punwar & Peloquin, 2000, p. 285).  | Using humor, listening, and allowing the child to express themselves.  |

Table 17. (continued)

|   |   |   |
|---|---|---|
| Validation of the child's feelings<br>(P4,6,7,8,9,10,11)                            | As defined by the Intentional Relationship Model (Taylor, 2008): The therapeutic mode of empathizing involves an "ongoing striving to understand the client's thoughts, feelings, and behaviors while suspending any judgment. Ensuring that the client verifies and experiences the therapist's understanding as truthful and validating" (Kielhofner, 2009a, p. 132). | Stopping the therapy session to talk about a child's dead goldfish. When a child stated, "I stink at that, that's crap," the therapist responded, "so you stink at it, let's do it anyway".                                       |
| Persistence and willingness to analyze the complexities of a child<br>(P1,2,4,9,10) | Occupational therapists analysis occupational performance by evaluating the "dynamic transaction among the client, the context and the environment, and the activity" to understand what is occurring. (AOTA, 2008c, p. 650).   | When a meltdown occurs, "You have to look at why it's happening and what's going to happen next and kind of, more just very careful to look at the big pictures when you're dealing with mental illness and mental health issues" |

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It is evident that although school-based occupational therapists struggle to articulate what psychosocial knowledge is, they use it in their everyday practice. In fact, school-based occupational therapists' psychosocial intervention strategies reflect AOTA's (2010) definition of psychosocial knowledge which includes the following concepts: motivation, self-efficacy, affect, mood, identity, self-concept, self-esteem, emotional regulation, coping, well-being, and life balance. Psychosocial skills defined by AOTA (2010) include the use of coaching, activity analysis, self-management strategies, and therapeutic use of self. Definitions of individual intervention strategies are presented in Table 17.

The use of behavioral strategies and sensory integration strategies by school-based therapists in this study was consistent with earlier studies by Barnes et al. (2003) and Case-Smith and Archer (2008). McDuff et al. (2009) found that therapists did not always use occupational therapy models from psychology in school-based practice which is in contrast to the findings of this qualitative study. Therapists in this study emphasized the use of holistic, occupation-based practice. Although not all therapists could define the name of the psychological theory, several reflected on the use of the psychodynamic model, behavioral model, and cognitive behavioral model in their practice. Uncovered in this study is that school-based occupational therapists do use psychosocial knowledge and intervention strategies in practice. Furthermore, this study was able to capture what specific psychosocial knowledge and interventions strategies are applied in school-based practice. Also, the knowledge that school-based occupational therapists have a difficult time directly articulating the use of psychosocial knowledge and defining what psychosocial knowledge is was uncovered.

Even though participants were proud of the psychosocial intervention strategies they used, the question is raised with regard to whether or not they undervalue or find it necessary to hide these skills. In particular, participants talked openly about holistic, client-centered, occupation-based practice, yet in the context of case scenarios, they would often describe the use of occupation-based practice as “trickery” or “going through the backdoor”. In other words, they would select an occupation of interest to the child in order to be client-centered and then they would embed the skill the child needed to work on in that client-centered activity. Therapists also referred to “off the record goals” as they discussed how they addressed psychosocial issues, such as a child experiencing grief.

Participants knew that before they could even address a difficult fine motor skill, they needed to address self-concept through sure success activities. Because occupational therapy goals were in the motor section of the IEP, self-concept or social behaviors were not written as goals under occupational therapy.

### **Impact on Child Psychosocial Knowledge**

The quantitative findings showed that educational level (bachelors, masters, doctorate) did not have an impact on the therapists' level of child psychosocial knowledge. Respondents to the instrument were asked to rate, "My academic course content included child mental health content?" Therapists were neutral with regard to whether or not it did (N=583; M 3.5; SD 1.12). The qualitative results supported these findings as therapists appeared to have equal knowledge regardless of academic level. In fact, therapists at different educational levels indicated that child psychosocial knowledge was not covered in any level of their training. One participant believed that it would be impossible to get psychosocial practice skills in the academic setting. That only facts came from academics and practice opportunities developed psychosocial knowledge and intervention strategies. Several participants believed that their psychology degrees impacted their child psychosocial knowledge or intervention strategies. Participants commented that they did not see all occupational therapy graduates equally prepared with psychosocial knowledge. Participants who held management positions indicated that there are therapists who have no idea what to do when a child has behavioral or emotional issues. The overall findings, that academic course content does not sufficiently cover child psychosocial knowledge, are consistent with previous research studies. Barnes et al. (2003) and Case-Smith and Archer (2008) found that two-thirds of respondents did not feel adequately prepared. McDuff et

al. (2009) found that therapists believed they learned more from experience, common sense, and life in general than they did from academics.

While the vast majority of participants in the quantitative component of the study had completed a mental health fieldwork, results did not suggest that there was a difference in child psychosocial knowledge between those that did and did not complete a mental health fieldwork. In the qualitative portion of this study, participants that completed mental health fieldwork with adults did not believe it impacted their child psychosocial knowledge. Several participants wished they had mental health fieldwork with children. One participant did complete a mental health fieldwork with children and felt that it had prepared her for the skill of rapport building and understanding of childhood diagnoses. Even though participants did not believe their mental health fieldwork impacted their child psychosocial knowledge, it was interesting that many of the psychosocial intervention strategies they described using would have been fostered in a mental health fieldwork, regardless of the age of the client. In fact, some of the participants even said that their adult mental health field placement helped them to communicate, use therapeutic use of self, and become familiar with mental health diagnoses. They did not seem to connect learning from an adult mental health environment to its application in other settings, such as current school-based practice where they were using these skills. Knowledge appeared to be compartmentalized, based upon age and population.

Even though the participants in the qualitative study did not feel adult mental health fieldwork impacted their child psychosocial knowledge, they believed mental health fieldwork was important. This may seem somewhat contradictory given that they didn't feel they learned anything about child psychosocial knowledge, yet still felt mental health

fieldwork made it easier for them to work with children who have emotional disturbance. They felt it was important because of the exposure to mental health and individuals who work on mental health teams. Participants also believed mental health fieldwork assisted in developing a comfort level for working with individuals who have mental illness. McDuff et al. (2009) found that therapists believed that mental health fieldwork would have helped them be more prepared to work with children who have emotional disturbance. Echoing this belief, Atwater and Davis (1990) suggested that past graduates felt that mental health fieldwork was important because not having a mental health fieldwork threatened a holistic approach to occupational therapy.

The impact of continuing education on child psychosocial knowledge was found to have only a slight significant correlation ( $r = .105$ ). Individuals participating in the qualitative portion of the study shared that continuing education helped them because they could reference recent continuing education when making recommendations for children with emotional disturbance. All participants wished they had more continuing education in order to be more effective in their interventions with children who had emotional disturbance.

Practice experiences and child psychosocial knowledge were also found to have a slight ( $r = .160$ ), but significant correlation. Again, these findings should be interpreted with caution given the large sample size and small correlation, but findings were supported by the qualitative component of the study. Participants strongly believed that much of their knowledge had been informed by practice experiences. Two participants indicated that practice in mental health occupational therapy contributed to their child psychosocial knowledge because they learned from other disciplines and had direct experience with

individuals with mental illness. Another individual indicated that through practice experiences she came to understand the importance of holistic and client-centered practice which better prepared her to work with children who have emotional disturbance.

### **School-based Occupational Therapists' Attitude Toward Children With Emotional Disturbance**

The quantitative findings suggested that school-based occupational therapists have an overall neutral attitude toward children with emotional disturbance. The response rate of 63% suggested that the topic of child psychosocial knowledge and attitudes was important to the respondents. These findings were supported by the qualitative component of the study where therapists expressed both positive and negative experiences that impacted their attitude. Quantitative survey items that asked about attitude toward children in a more positive manner were consistent with the findings of the qualitative interviews. Participants in the qualitative portion of the study believed that they were able to view children with emotional disturbance positively by staying true to holistic, occupation-based, and client-centered practice. They believed these principles allowed them to understand the child more fully and be prepared to adapt if that was needed by the child. One participant even believed early in her practice she had a negative view of children with emotional disturbance, but that she experienced a transformation as she watched another therapist use holistic, occupation-based, and client-centered philosophy in practice. Participants believed that accepting small changes helped them to maintain a positive attitude toward children with emotional disturbance. Finally, using their "bag of tricks" or psychosocial intervention strategies discussed in Table 17 were key to their ability to maintain a positive attitude toward children with emotional disturbance.



The term emotional disturbance revealed stigma that still exists, both with school-based occupational therapists and the systems within which they work. Participants in the qualitative interviews essentially wished the term was not used. In addition to the already discussed lack of clarity regarding the term, many felt the term was offensive and difficult to handle. Therapists suggested that their districts avoided the term as much as possible because it was difficult for parents to accept. Others believed that autism would be preferred because services for children with emotional disturbance are not adequate. One therapist was asked to see a child who was on an IEP for emotional disturbance. She stated that she was scared by what she heard and read about the child, but in the end the child was doing very well and not scary at all. Clearly, the qualitative portion of the study supports that a negative attitude is associated with the term emotional disturbance.

Although therapists in this study overcame their fears of children with emotional disturbance, they described experiencing fear, which is consistent with earlier studies that found school-based occupational therapists viewed behavior as scary and an obstacle to intervention (Beck et al., 2006; Case-Smith & Archer, 2008). Feelings toward the term emotional disturbance were not measured on the quantitative instrument.

In regard to working on a school-based team and serving children with emotional disturbance, qualitative findings revealed that therapists had a realistic view of working with the team in that they identified negatives and positives. One concern of therapists was the way in which staff spoke around children who have emotional disturbance and about children who had emotional disturbance. Participants viewed this as contributing to negative attitudes. The item, "occupational therapists need to be careful what they say around students with mental illness," on the quantitative instrument had a mean score of

3.48 (SD .84) which suggested respondents to the quantitative instrument may also have concerns about the way in which children with emotional disturbance are spoken to.

Experiences on school-based teams for participants in the qualitative study was not similar to early findings which found that turf issues deterred occupational therapists from being involved with children who have emotional disturbance (Beck et al., 2006; Case-Smith & Archer, 2008). Instead, participants in this study felt that “it takes a village” and that teams they worked on accepted ideas regardless of the discipline offering them. Interestingly, three therapists worked in schools where they provided services to students only in the classroom. All of these therapists commented on what a positive experience it was to work with teachers in the classroom. They described scenarios where the teacher took the lead and they were there to support the teacher so that the child to have success. Other therapists also had a positive experience, but they often provided services in a pull-out setting. These therapists described more difficulty in staying consistent with behavioral interventions.

Although parents have been viewed as an obstacle or barrier in school-based practice in the past (Barnes et al., 2004; Beck et al., 2006; Case-Smith & Archer, 2008), the qualitative portion of the study was able to give a better understanding of the experience of working with parents of children who have emotional disturbance. Participants acknowledged frustration in working with parents, yet the overwhelming sentiment was that, over time, therapists had developed empathy for parents. One sentiment echoed by all participants was the need to understand that a parent is seeing their child struggle and that it takes time for parents to come to terms with their child’s disability. Although allowing this grieving to take place was accepted, frustration

regarding the time it took to get children appropriate help was acknowledged. Participants believed that it was essential to look at the family situation to understand the whole picture. Blaming “bad parenting” was not acceptable.

Previous studies suggested that school-based therapists found system-wide issues to be obstacles to their occupational therapy intervention (Barnes et al., 2003; Beck et al., 2006; & Case-Smith & Archer, 2008). System issues were an obstacle for participants in this study, with some issues explicitly stated and others implied. A question on the quantitative instrument and comments by participants in the qualitative interviews suggested that therapists understood that school systems are under financial distress. Those interviewed suggested that students with emotional disturbance are often not referred to special services that would support them in becoming successful because of the cost. They also felt that the mental health services in their districts were poor, secondary to staff burn-out and financial issues.

Participants in the qualitative study shared concerns they had about the system’s requirement for children to fail prior to receiving special education services. Therapists believed that the requirement that a child fail before receiving special education services resulted in self-esteem issues for the child because the child would struggle and be ostracized from others. Several participants stated that schools are not client-centered, which can be a challenge from their professional point of view. For example, one therapist suggested that schools value academics rather than all talents of children. Participants expressed concern regarding school evaluation, which primarily focused on teachers, parents, and other staff providing feedback, with very little opportunity for a child to give their input. Therapists felt that students were expected to adapt to the school, versus the

school adapting to the child, which was also a challenge for their ability to apply their client-centered practice.

Another concern that emerged is the pressure that is felt by the occupational therapist, as a related service, to follow the IEP. As stated earlier, the occupational therapy goals fall under the motor section of the IEP, which to some participants meant that it would be inappropriate to address a psychosocial goal. One participant stated that she would set a goal regarding self-regulation using sensory approaches in order to allow for time for the child to calm or teach calming skills. She felt it was necessary to have the goal because if a session went poorly because the child was distressed that day, she still wanted to meet the IEP goal. Participants reported that even though they did not have a psychosocial goal on the IEP they still addressed psychosocial issues, such as self-esteem or depression, while engaging in intervention focused on motor goals.

Therapists shared that often the IEP goal involves a skill, like handwriting, that is a trigger for emotional meltdowns. Not addressing the emotional component of feeling inadequate would be inappropriate according to the therapists. The IEP goal is not always the goal of the child, also bringing challenges to client-centered services. Again, therapists tackled this through finding occupations of interest to the child that involved skills the child needed to address. Therapists shared that it was important to find success experiences and to acknowledge self-esteem issues directly with the child.

Clearly, school-based occupational therapists participating in this study experienced tension while trying to stay true to their holistic, occupation-based, and client-centered philosophy (Figure 2). Participants believed their ability to stay focused on holistic, occupation-based, and client-centered care enabled them to maintain a positive

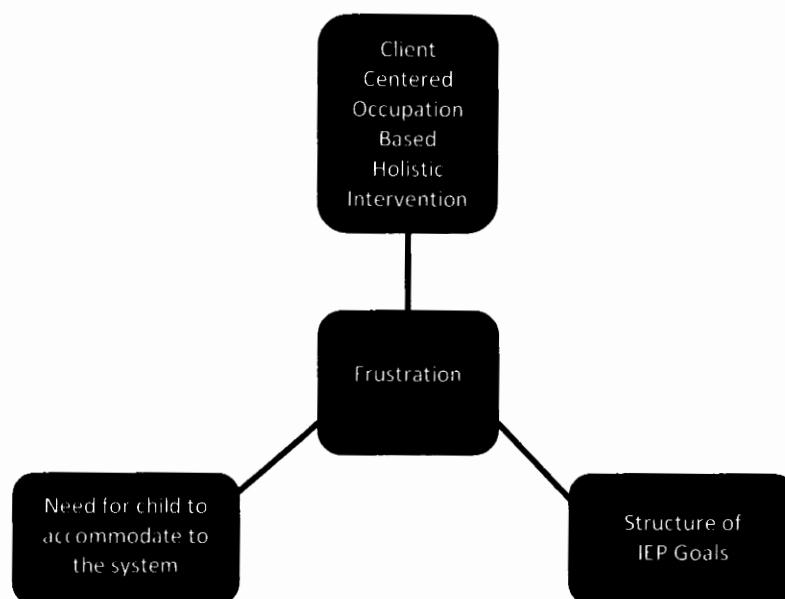


Figure 2. Tension Between Occupational Therapy Philosophy and System-Demands (School-based occupational therapists experience frustration because there is conflict between their professional philosophy, the structure of IEP goals, and system's demand for a child to adapt to the system).

attitude toward children with emotional disturbance. They demonstrated their commitment to these occupational therapy principles, along with other psychosocial intervention strategies in their case examples. As described earlier, along with their commitment to occupational therapy principles come challenges that are imposed by a school system that does not always foster these principles. Participants acknowledged a school system that does not always involve the child in the planning; therefore, setting goals that are not what the child wants. Therapists also recognized that a large school system requires the child to accommodate to it, rather than the system accommodating to the child. Finally, therapists developed an intervention plan that fell under the motor section of the IEP, which does not easily allow them to directly state what psychosocial concerns are being addressed within the context of the motor skills. A written intervention plan that focused only on motor skills reflected a reductionist versus holistic occupational therapy approach, which, in the

case of these participants, does not reflect the services they are providing to children in schools.

Occupational therapists practicing in school-based settings are not the only occupational therapists struggling to stay true to their holistic, occupation-based, and client-centered practice. Hanson (2009) studied occupational therapists practicing in a medical setting and found that, instead of IEPs, medical reimbursement, temporal, and physical realities within the medical setting made holistic and occupation-based care challenging. Occupational therapists in the medical setting practiced their holistic care in a clandestine fashion, just as school-based occupational therapists practice. Length of practice and continuing education strengthened identity. Similar to the tension experienced by school-based occupational therapists, Finlay (2001) found that occupational therapists in a medical setting also experienced tension. This tension resulted when therapists struggled to practice their ideals. Like Hanson's (2009) findings, Finlay (2001) reported that work context required them to be pragmatic and strategic which at times compromised practicing their occupational therapy ideals.

### **Impact on Attitude Toward Children With Emotional Disturbance**

The quantitative results did not suggest that level of academic preparation had an impact on attitudes toward children with emotional disturbance. Qualitative findings were similar to the quantitative findings in that participants prepared across academic levels appeared to have similar attitudes. The quantitative findings suggest a small, but statistically significant and negative correlation ( $r = -.106$ ) between child mental health course content and attitude. Lower scores on the attitude scale suggested more positive attitudes. The negative correlation suggests that higher level of course content resulted in

lower scores on the attitude scale, signifying that those who had higher levels of course content had more positive attitudes. The findings from the qualitative study do not support that course content made an impact on attitude toward children with emotional disturbance, as all participants suggested they hadn't had sufficient child psychosocial course content.

Although the quantitative results suggested that there was no difference in attitude based upon whether or not therapists completed a mental health fieldwork, findings of the qualitative analysis were in contrast to these results. Participants viewed mental health fieldwork as positive influence because it allowed them to become comfortable with individuals who have mental illness. Similarly, Atwater and Davis (1990) found that mental health fieldwork was valuable because students learned to deal with emotions of self and others. In fact, participants suggested that those who do not have mental health fieldwork of any kind are scared when they have to see children who have emotional disturbance. It appears that in this study, mental health fieldwork was of high value because it took down stereotypes and improved comfort level. This was a similar finding to previous studies addressing the impact of mental health fieldwork on attitudes that found that fieldwork can have a positive impact on attitude, if it is coupled with processing and support during those experiences (Beltran, et al., 2007; Gilbert & Strong, 2000; Lyons & Ziviani, 1995). Therapists in this study spoke of the impact their fieldwork educator had on their comfort level with clients who had mental illness.

Quantitative findings suggested that there was a relationship between attitudes and continuing education, however, it was small. Therapists in the qualitative portion of the study suggested that they felt more positive about their ability to make recommendations

and believed they were accepted on the team when they were able to utilize and reference continuing education regarding children with emotional disturbance.

Although small, there was a statistically significant relationship between practice experience and attitude toward children with emotional disturbance. The qualitative findings suggested that rich experiences where therapists were able to be exposed to children who had emotional disturbance and have successful intervention helped one therapist have a more positive attitude. Several therapists suggested that working in mental health occupational therapy practice was influential in regard to their attitudes. Finally, participants stated that practice experiences that involved exposure to other disciplines and occupational therapy colleagues who displayed positive attitudes impacted their attitude toward children with emotional disturbance.

Not queried about on the quantitative instrument, but clearly articulated by participants in the qualitative portion of the study, was life experience and its impact on how participants viewed children with emotional disturbance. All these experiences were described as rich experiences where participants were exposed to people with mental illness and had the resulting outcome of the individual feeling more comfortable around mental illness. These experiences were not just through fieldwork or academics, but rather through life. Watching a father run a sheltered workshop, volunteering as a teenager with individuals who had disabilities, having a parent with a disability, a Catholic upbringing, and having emotional difficulties themselves were viewed as strongly contributing to their attitude toward children with emotional disturbance. McDuff et al. (2009) found similar results in their qualitative study where participants strongly believed that life experience had impacted their comfort level with emotional disturbance.



## Summary

This mixed-methods study was conducted for the purpose of examining school-based occupational therapists' current level of child psychosocial knowledge and attitudes and their experiences in developing their child psychosocial knowledge and attitudes. Review of occupational therapy literature suggested that school-based occupational therapists did not believe they had adequate child psychosocial knowledge or that they consistently applied psychosocial knowledge they did have in their practice. School-based occupational therapists instead, struggled to overcome many barriers to their ability to apply child psychosocial knowledge such as role delineations on teams, behaviors of the children themselves, difficulty with parents, and not having enough knowledge to feel comfortable with intervention. One result of these previous studies was the publishing of documents by the occupational therapy profession that might help therapists use their psychosocial background in school-based practice in order to be more holistic practitioners. The purpose of the quantitative portion of this mixed-methods study was to measure the psychosocial knowledge and attitudes of school-based therapists, as previous studies asked therapists their opinion about their knowledge instead of directly measuring it. In addition, although past studies suggested school-based occupational therapists did not feel confident in their psychosocial knowledge, the qualitative portion of this mixed-methods study sought to understand the therapists' experience in developing their knowledge and attitudes, as well as more specifically understand what knowledge they do apply in practice.

This mixed-methods study used a triangulation convergence model which allows for collection of quantitative and qualitative data at the same time. Following collection

and analysis of separate data sets, comparison and contrast of the data sets was completed to interpret the results. This study employed an instrument used to measure child psychosocial knowledge and attitudes and the qualitative method of phenomenology to understand the school-based therapists experience in developing their child psychosocial knowledge and attitudes. Qualitative methods were used to answer the following broad research question: What meaning do school-based occupational therapists give to their experience in developing child mental health knowledge and attitudes? Subquestions included: (a) What experiences have influenced the development of child psychosocial knowledge and attitudes for school-based occupational therapists? (b) How have different contexts (academic, fieldwork, and practice) influenced the development of psychosocial knowledge and attitudes for school-based occupational therapists? (c) What are the key constituents that influence the development of child psychosocial knowledge and attitudes for school-based occupational therapists?

Quantitative methods were used to answer the following research questions:

(a) What level of general child psychosocial knowledge do school-based occupational therapists currently possess? (b) What are the attitudes of school-based occupational therapists toward children with emotional disturbance? (c) How does the level of general child psychosocial knowledge and attitudes of school-based occupational therapists compare to teachers' general child psychosocial knowledge and attitudes? (d) Is there a difference in knowledge and attitudes based upon level of preparation (bachelors, masters, or doctoral)? (e) Is there a relationship between the level of general knowledge or attitudes and the level of specific child mental health course content in therapists' academic curriculum? (f) Is there a difference in knowledge and attitudes between therapists who

completed mental health fieldwork and those who did not? (g) Is there a relationship between the level of general knowledge or attitudes and the incorporation of psychosocial knowledge into non-mental health fieldwork? (h) Is there a relationship between general knowledge or attitudes and continuing education courses specific to mental health since graduating? (i) Is there a relationship between general knowledge or attitudes and practice experiences with children who have emotional disturbance?

For the qualitative portion of the study, the sampling method of snowballing was used to select 11 school-based occupational therapists from across the United States. Interviews were forty-five to seventy-five minutes in length. Ten of the interviews took place at the 2010 American Occupational Therapy Conference and Expo and the remaining interview took place in North Dakota. Data were analyzed using Giorgi and Giogi's (2008) method of phenomenology based upon the work of Husserl. Data analysis began with reading the entire description of the experiences to gain a sense of the whole. Analysis continued by breaking the descriptions into meaning units. Meaning units were then transformed to take what is implicit to explicit in order to understand the psychological meaning. The final step in the analysis was the development of the general structure of the experience followed by discussion of that experience.

The general structure of the experience for school-based occupational therapists suggested that school-based occupational therapists have a positive attitude toward children who have emotional disturbance. This attitude is maintained by staying true to the occupational therapy philosophy of holistic, occupation-based, and client-centered practice. School-based occupational therapists deal with the challenges they face by accepting that children who have emotional disturbance may progress slowly in

intervention. The confidence these therapists experience stems from having many types of strategies at their disposal, as well as the ability to shift gears, think outside the box, and adapt on the go. Although school-based occupational therapists utilize many psychosocial strategies, they have a difficult time directly articulating the psychosocial knowledge base unique to occupational therapy. It may be that psychosocial knowledge is a hidden treasure, undervalued skill, or just a misunderstood term. School-based therapists acknowledge a presence of stigma toward children who have emotional disturbance. School-based occupational therapists possess a realistic view of working within the system, on school-based teams, and with parents. This realistic view encompasses the employment of empathy and specific strategies to maintain a positive attitude. Rich experiences in which school-based occupational therapists have been able to gain comfort with mental illness and occupational therapy philosophy contributed most profoundly to their child psychosocial knowledge and attitudes.

Random sampling was used to select the sample for the quantitative instrument. The Occupational Therapy Child Mental Health Questionnaire was sent to 1,000 members of the American Occupational Therapy Association Early Intervention and School System Special Interest Section. The questionnaire included 40 items from the instrument Teacher Mental Health Opinion Inventory. The selected individuals were sent an initial mailing, follow-up reminder postcard, and third mailing. The response rate was 63%. The data were analyzed first to confirm validity and reliability. The 40 items that were taken from the Teacher Mental Health Opinion Inventory and used in the Occupational Therapy Child Mental Health Questionnaire did not reveal the same construct validity, therefore, the two factors that most closely resembled the original instrument's intended factors (knowledge

and attitude) were retrained and data analysis to answer the research questions was completed.

Data analysis suggested that school-based occupational therapists do have child psychosocial knowledge. School-based occupational therapists present with an overall neutral attitude toward children with emotional disturbance, having a more positive attitude toward the children themselves than they do toward system-wide issues related to intervention for children with emotional disturbance. The completion of mental health fieldwork did not have a statistically significant impact on child psychosocial knowledge or attitudes. Level of educational preparation did not have an influence on knowledge or attitude level of school-based therapists. Data were analyzed for relationships between child psychosocial knowledge and attitudes and the following factors: (a) child mental health course content, (b) using psychosocial knowledge in non-mental health fieldwork, (c) mental health continuing education, and (d) practice experiences. Findings suggested small, but statistically significant correlations between child psychosocial knowledge and applying psychosocial knowledge in non-mental health fieldwork, mental health continuing education, and practice experience. Small, but statistically significant correlations, were found between attitude toward children with emotional disturbance and child mental health course content, using psychosocial knowledge in non-mental health fieldwork, mental health continuing education, and practice experiences. Given the small size of the correlations and the large sample size which may have influenced statistical significance, these results should be viewed with caution.

Mixed-methods data analysis, which involved comparison and contrast of the qualitative and quantitative data, revealed that data sets were complementary to each other.

Many of the findings from the qualitative data collection not only supported, but also enhanced the findings of the quantitative instrument. While the quantitative instrument suggested that school-based occupational therapists do have child psychosocial knowledge, the qualitative analysis uncovered that this knowledge was primarily related to psychosocial intervention strategies they used with children who have emotional disturbance. These psychosocial intervention strategies included using the profession's holistic, client-centered, and occupation-based philosophy. Along with the profession's philosophy, school-based therapists also used psychosocial intervention strategies based on other disciplines. Such strategies included: behaviorism, cognitive behavioral approaches, and the psychodynamic model. Therapists were more familiar with autism and its etiology than other DSM-IV diagnoses. The term emotional disturbance and what diagnoses belonged under the category was defined differently by participants. Finally, the qualitative analysis revealed that the term psychosocial knowledge is a term that therapists were uncomfortable with as they did not know if their way of defining it was accurate. Directly articulating their psychosocial knowledge was difficult for participants, however they were able to do so through rich and descriptive cases.

In the analysis of factors that influenced psychosocial knowledge, both qualitative and quantitative data sets suggested that therapists did not feel their child mental health course content was sufficient at any academic preparation level. Completion of a mental health fieldwork was not found to influence child psychosocial knowledge in either data set. Qualitative participants expressed that they wished they would have had a child mental health fieldwork rather than only an adult mental health fieldwork. Somewhat contradictory was the belief of the participants in the qualitative study that mental health

fieldwork was important even if they didn't learn child psychosocial knowledge.

Participants valued mental health fieldwork for providing exposure to mental illness and mental health teams. Even though psychosocial intervention strategies that should have been fostered in an adult mental health fieldwork were identified as being used in practice today, therapists did not seem to connect that they had developed these strategies in mental health fieldwork. Continuing education was seen as impacting child psychosocial knowledge in both data sets with qualitative participants reporting that quoting from continuing education course work made them more reputable team members. Practice experience was found to have an influence on child psychosocial knowledge. Qualitative participants believed that early practice in mental health and observation of team members using holistic, occupation-based, and client-centered practice improved their child psychosocial knowledge.

While the quantitative instrument suggested that school-based therapists had a neutral attitude toward children with emotional disturbance, the qualitative interviews provided much more depth about this attitude. School-based occupational therapists present with a positive attitude toward children with emotional disturbance and maintain this attitude through the application of their psychosocial intervention strategies which include holistic, occupation-based, and client-centered philosophy. Even though they felt positively about the children, they expressed stigma regarding the term emotional disturbance. Therapists had a positive attitude toward working with team members, however, voiced concern about the ways in which children are spoken to and spoken about. Empathy for parents, which involved an understanding of the parent's experience and need to grieve, appeared to help the therapists maintain a positive attitude. Even so, therapists

admitted to frustration about the time it takes to get a child into appropriate services because of the grieving process that occurs for parents.

System-wide school issues appeared to be the most frustrating for school-based therapists. While trying to stay true to their holistic, occupation-based, and client-centered philosophy, school-based occupational therapists describe experiencing difficulty for a variety of reasons. The requirement for a child to fail prior to receiving services was cited as a concern. Therapists suggested that evaluation is not client-centered, collecting data instead from the team and parents. A school's focus on academic ability versus all types of abilities also challenges their profession's philosophy. An IEP that requires occupational therapy goals to come under the motor section can also make adherence to holistic intervention difficult. Therefore, holistic intervention is often hidden because it is not on a written plan and often not spoken of even though it is occurring.

Analysis of factors that influenced attitude toward children with emotional disturbance revealed qualitative and quantitative data sets to be contradictory at times. The quantitative results suggested that course content did have an impact on attitude; however, it was a small correlation. Participants in the qualitative study stated that course content was not sufficient and therefore did not influence attitude. Quantitative results suggested that mental health fieldwork did not have an impact on attitude. On the other hand, the qualitative participants identified a positive impact on attitude stemming from their perception of mental health fieldwork as a place where they became comfortable with individuals who had mental illness. Quantitative findings and qualitative findings both supported the importance of practice experience and continuing education and its influence on attitude. Not measured on the quantitative instrument, but clearly articulated by



participants in the qualitative study, was the positive impact life experiences had on how they view children with emotional disturbance.

### **Conclusions and Recommendations**

Key findings in this research study included the following: (a) school-based occupational therapists possess and use child psychosocial knowledge; however, they do not believe it is sufficient; (b) school-based occupational therapists have a difficult time articulating psychosocial knowledge; however, through case descriptions they are able to give many examples of psychosocial knowledge they use in practice; (c) school-based occupational therapists believe that holistic, occupation-based, and client-centered practice, along with additional psychosocial intervention strategies like therapeutic use of self, help them maintain a positive attitude toward children with emotional disturbance; (d) school-based occupational therapists experience tension when attempting to apply their holistic, occupation-based, and client-centered practice in an environment that is typically focused on students changing to meet the environmental demands; (e) due to the constraints of the educational system and the IEP, school-based occupational therapists practice holistically by incorporating psychosocial knowledge in a hidden fashion; (f) school-based occupational therapists believe that mental health fieldwork and rich experiences with individuals who have mental illness is important to developing a comfort level with people who have mental illness; (g) school-based occupational therapists do not readily connect the learning from adult mental health fieldwork that they apply in their school-based practices (therapeutic use of self, behavioral strategies, and cognitive behavioral strategies).

The results of this study have increased an understanding about the school-based occupational therapists' experience in developing and using psychosocial knowledge in practice. The results have also provided further insight into influences on their attitude toward children with emotional disturbance. These findings have implications for future academic education, fieldwork education, and practice.

School-based occupational therapists are asking for more child psychosocial knowledge, especially with regard to disorders of childhood. Although therapists reported having adult mental health course content, they did not report receiving child mental health course content. There is concern that although they understand the etiology of autism, they are not as aware of other disorders and their etiologies. It is important that academic course content introduce childhood disorders and their diagnostic criteria and etiology. Understanding etiology may decrease stigma toward mental health conditions experienced by children. In addition, earlier intervention with regard to mental health issues places school-based occupational therapists in a position of identifying those children at risk, but not knowing what "at risk" means will make that task difficult. A review course that covers mental health conditions in childhood may be beneficial for practicing school-based occupational therapists. Fieldwork educators might also collaborate with their fieldwork students in reviewing diagnostic criteria and etiology for a diagnosis they are unfamiliar with and are currently seeing in their practice.

In the last several years, AOTA has produced a number of documents that define what psychosocial means and what using psychosocial knowledge looks like in different practice settings (AOTA, 2004; AOTA, 2008a; AOTA, 2008b; AOTA, 2009a; Jackson & Arbesman, 2005). School-based therapists were uncomfortable with the word

psychosocial and unsure about their own understanding. These findings suggested that school-based therapists are beginning to understand, but continue to need more assistance in articulating psychosocial knowledge. Because the occupational therapist's intervention falls under the motor section of the IEP, school-based therapists may consider setting goals that connect self-concept or emotion regulation to the motor skill. Also, even if psychosocial performance skills can't be directly stated on the IEP goal, they could be stated and articulated in the occupational therapy assessment. Selecting assessments that consider psychosocial performance skills as well as the child's view of their performance is one way to increase written articulation of the occupational therapist's holistic practice. School-based therapists might also speak more openly regarding their intervention approaches and how they embed the IEP goals into occupations of interest to the child. The occupational therapy manager would be essential in promoting that occupational therapists in school-based settings take these steps. As fieldwork educators, school-based occupational therapists are encouraged to take time to articulate and share about ways that they use psychosocial knowledge in practice. Using psychosocial knowledge is often thought of as something occupational therapists just do, but don't talk about. This approach makes it difficult for novice therapists to understand how they are using psychosocial knowledge in practice. One method for doing this might be having the fieldwork student select a case of the week for the fieldwork educator and student to discuss with a special emphasis on how the child's psychosocial needs are being addressed in the context of occupational therapy intervention. Again, if psychosocial needs are addressed through assessment, this will teach the fieldwork student how to assess and address psychosocial needs as well.

Academia plays an important role in teaching future students not only what psychosocial knowledge is and how to use it in practice, but also how to show it through documentation and sharing with the team. Most importantly, time must be given to reviewing the profession's definition of psychosocial and just what psychosocial knowledge and skills include. Consideration should be given to ensuring that course content is not segregated, but rather that opportunity for integration of course content is occurring. In this study, several therapists did not recognize that they were using psychosocial knowledge by applying psychosocial intervention strategies. These strategies should have been developed on their adult mental health fieldwork, but therapists did not recognize this. Utilizing case studies that could be used across classes in one semester might be one way to help ensure that students integrate course content. Additionally, it would be beneficial to prompt students to consider what types of psychosocial theory or intervention strategies may be useful even if the focus is on a motor condition. For example, if a student is writing an intervention plan for a child who has cerebral palsy and the goal is independent toileting, ask what psychosocial strategies might be used if the child is not motivated to engage in independent toileting. If a student is developing an intervention plan focused on transfers for a stroke patient, but the patient is belligerent and refusing, ask why that might be and how this could be addressed. Similarly, when discussing mental health cases, it is important to address physical issues to ensure that students are taught to think holistically across the lifespan and areas of practice. Teaching curriculum in a compartmentalized fashion can be at odds with the profession's philosophy, yet is sometimes necessary in order to organize content. Care must be taken to assist students in integration of academic content.

Students completing the classroom component of their education are being taught the principles of holistic, occupation-based, and client-centered practice. However, they are often asked to apply them in settings that do not foster these principles. Academia might consider discussing the context of school-based practice and factors that may serve as barriers to fulfilling their commitment to their profession's philosophy. Students who are prepared for such difficulties and how they might overcome them might experience less frustration and provide better intervention for the children on their caseloads. Students might be asked to reflect on barriers to occupational therapy philosophy when they engage in Level I and Level II fieldwork.

Mental health fieldwork opportunities have been more difficult to obtain in recent years. Fewer occupational therapists are practicing in traditional mental health practice. This has led to creativity in developing mental health fieldwork, but also a discussion of whether or not to continue mental health fieldwork. Students are not currently required to complete a mental health fieldwork, but findings of this study support its value. Participants also suggested that they wished they had a child mental health experience. Academic programs are strongly encouraged to consider the findings that students view mental health fieldwork as important to promoting their comfort level with individuals who have mental illness. Participants also suggested that this was how they learned about members of a mental health team and developed confidence in working with teams in their school-based practice. At the very least, if mental health fieldwork is not available, rich experiences where students may be exposed to people with mental illness might improve their comfort level in future practice.

Fieldwork, whether completed in a mental health setting or another setting, is the place where students put into practice what they learn in the classroom. It is important that fieldwork coordinators from the academic setting and the fieldwork educators from the practice setting work together to ensure practice experiences where students are called to engage in holistic, occupation-based, and client-centered practice. In fact, the Accreditation Council for Occupational Therapy Education (ACOTE) standard B.10.15 states in regard to fieldwork, "In all settings, psychosocial factors influencing engagement in occupation must be understood and integrated for the development of client-centered, meaningful, occupation-based outcomes" (AOTA, 2007a, p. 661). Because experienced therapists may have difficulty articulating how they address psychosocial factors in practice or may not address it at all, it is important for academic fieldwork coordinators to evaluate the fieldwork educator's efforts to address psychosocial factors. Fieldwork coordinators can offer suggestions for how to incorporate psychosocial factors into their practice as well as teach fieldwork educators methods of how to communicate this to their fieldwork students.

Future research related to this study might include the study of additional school-based therapists from a qualitative perspective to see if their experiences are similar to those that participated in this study. Psychosocial knowledge and attitudes may also be studied in other non-mental health settings such as outpatient pediatric clinics, hospitals, and skilled nursing facilities. The qualitative portion of this study revealed different barriers to intervention with children who have emotional disturbance. It also revealed several psychosocial intervention strategies that are being used. Qualitative studies in different practice settings would help gain an understanding of whether or not psychosocial

intervention strategies are similar across practice contexts. The information about barriers and psychosocial intervention strategies gained from this study could be useful in developing an instrument to obtain quantitative data across a larger sample. In regard to the quantitative results, given that the instrument did not have the same construct validity as the instrument it was based upon; research could continue to further develop an instrument that measures psychosocial knowledge and attitudes in school-based occupational therapists. This instrument could be helpful in assessing learning that may occur as a result of changes to academic curriculum or fieldwork experience.

### **Strengths and Limitations**

The phenomenological portion of the study involved 11 school-based occupational therapists from across the country, with 10 of the participants attending the American Occupational Therapy Association Annual Conference. The number of participants, along with the geographical location of the participants was viewed as a strength of the study. The participants were actively involved in reviewing the data analysis strengthening the credibility of the work. It is noted that participants in this study were highly motivated occupational therapy practitioners who attended and presented at the annual conference. Data were gathered exclusively through interviews where therapists described their interventions, but interventions were not witnessed. Credibility might be strengthened by observing school-based therapists in practice and by interviewing individuals on the school-based team who see the school-based occupational therapists' work. The method of participant selection allowed individuals to volunteer themselves or recommend an individual who might be willing to be interviewed which could have led to individuals who had an interest in psychosocial knowledge in practice.

The quantitative data collection had several limitations. Only individuals who belonged to the American Occupational Therapy Association and were members of the School System and Early Intervention Special Interest section who marked “school” as their primary work environment had an opportunity to be randomly selected to participate. There are some school-based occupational therapists who do not belong to the American Occupational Therapy Association. Generalizability is limited to school-based therapists who belong to the American Occupational Therapy Association. The instrument itself was a limitation of the study. The instrument did not have the same underlying constructs when used with school-based occupational therapists as it did when it was used with teachers. Because the instrument did not have the same constructs, the two constructs that most closely resembled the initial constructs of the instrument, knowledge and attitude, were selected and used for data analysis. The decision to select only the two constructs resulted in many items not being accounted for, and therefore, less understanding of the school-based occupational therapists’ knowledge and attitudes through the quantitative instrument. Also, the two constructs that were selected did not have high reliability. Cronbachs Alpha for the knowledge construct was .612 and for the attitude construct was .578.



### **Personal Reflections**

The process of independent research has been an enriching experience. The most exhilarating aspect was engaging with participants. School-based occupational therapists are truly wonderful people. The individuals involved in the qualitative portion of the study not only took time from their busy days at the conference for interviews, but also communicated with this researcher via email regarding the study. In their email responses they provided encouraging words and displayed excitement for the work that was being done. Respondents to the instrument were also fantastic. Many individuals wrote a page about their thoughts of occupational therapy and its need to integrate their psychosocial roots into schools. These therapists also provided words of encouragement along the way. The response rate of 63% demonstrates this group's commitment to research. In fact, several therapists wrote apologies in instances when they hadn't put the instrument in the mail right way, almost as if it was an assignment they were obligated to complete. As a non-school-based therapist, I learned so much from my participants about working in schools. This knowledge gives me a better understanding of that experience and will help me when I am teaching students about addressing child psychosocial issues in school-based settings. Also, the knowledge has helped me provide better recommendations for students transitioning back into the schools from the day treatment program setting.

Learning the process of Giorgi and Giorgi's (2008) phenomenological reduction was also fascinating. Because I wanted to be able to show the process I used to come to my results, I used a grid format for analysis. Although very time consuming, the grid format proved helpful in removing bias and assisted me in understanding the experience of school-based therapists. This method also helped in the discussion of the general structure

as it was easy to trace back to initial comments that supported the findings. Qualitative research itself was truly rewarding to me. I find myself to be a black and white thinker, and having gone through this process, I can now say how truly rich and meaningful data from qualitative research can be.

The most challenging component of the study was the quantitative instrument. I found myself in a panic when the constructs did not match the original constructs of the instrument. I felt so indebted to the respondents and so obligated to provide results that I truly felt I had let them down by selecting the instrument I did. This frustration and uncertainty also allowed me to look closely at integrity and honesty in research. I had the opportunity to make decisions and needed to support each decision I made. This was an interesting experience, as I honestly perceived quantitative research to be much more black and white than what it was in this instance. Even though I heard it said in class, this experience confirmed for me that statistics are a tool to assist in decision making, but that one must also use common sense. I was able to learn more about factor analysis than I had anticipated. In the end, I learned that research doesn't always go smoothly. This experience helped me to understand how importance it is for one to have resources and to know and draw from individuals who have expertise in areas that I do not. Obviously, I learned to select a better instrument as well.

During my struggles with the quantitative instrument and especially during the mixed-methods data analysis, I gained a new level of respect for the depth and breadth offered by qualitative research. I also know that quantitative instruments can provide great insight, if they are well developed. I see this in my daily practice. Working on a mental health team, I often see the psychologist use the Minnesota Multiphasic Personality

Inventory, a tool that is highly regarded in my setting. The information is informative and very useful in intervention planning. On the other hand, our psychologist also uses the Gilliam Asperger's Disorder Scale, for which our team has little respect because it actually measures social skills deficits, rather than to what extent these deficits are caused by Asperger's disorder. In other words, most children we see have social skill deficits, but that does not mean they have Asperger's disorder. This experience has truly taught me to better analyze an instrument for research and for practice.

Finally, tackling a mixed-methods study was a huge endeavor for a first project. There were many times I wondered if I would ever make sense of the data. The experience of research as a distance student was also interesting. Although I was lucky to have colleagues and my advisor whom I could call to speak with, my not being on campus or having individuals to just quickly process something with was an isolating experience. I have formed many relationships with those in my cohort, but there are very few individuals who were in the same phase of their research. Not being in class together anymore also made it difficult to contact them given all of our busy schedules. There were times I wanted to quit because obstacles came my way, but the participants and my passion for psychosocial occupational therapy really were my inspiration to keep going. I believe that the mixed-methods approach allowed me to get a taste of two very different types of research and to accomplish the goal of a dissertation, that of becoming a researcher.

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Yucker, H. E., Block, J. R., & Campbell, W. J. (1962). *Disability types and behavior*

*(Human Resources Study NO. 6).* Albertson NY: Human Resource Center.

Zimmer, L. (2006). Qualitative meta-synthesis: A question of dialoguing with texts.

*Journal of Advanced Nursing, 53, 311-218.*



## APPENDIX A. IRB APPROVAL

NDSU

NORTH DAKOTA STATE UNIVERSITY

Institutional Review Board

Office of the Vice President for Research, Creative Activities and Technology Transfer  
 NDSU 1490 4006  
 1735 NDSU Research Park Drive  
 Grand Forks, ND 58202-5050  
 Fargo, ND 58103-5050

701.231.2295  
 Fax: 701.231.2698

Federalwide Assurance #FWA00002439  
 Expires April 24, 2011

March 15, 2010

Kathy Enger  
 School of Education  
 201D FLC

IRB Expedited Review of: "A Quantitative and Qualitative Inquiry Ito the Impact of Academic Curriculum, Degree Level, Fieldwork Experience, and Professional Experience on School-Based Occupational Therapists' Psychosocial Knowledge and Attitudes". Protocol #HE10192

Co-investigator(s) and research team: Sarah Nielsen, Sonia Zimmerman

Research site(s): varied

Funding: n/a

The protocol referenced above was reviewed under the expedited review process (category # 7) on 3/7/2010, and the IRB voted for:  approval  approval, contingent on minor modifications. These modifications have now been accepted. IRB approval is based on the original submission, with revised protocol and consent forms (received 3/10/2010 and 3/15/2010).

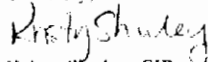
Approval expires: 3/6/2011 Continuing Review Report Due: 2/1/2011

Please note your responsibilities in this research:

- o All changes to the protocol require approval from the IRB prior to implementation, unless the change is necessary to eliminate apparent immediate hazard to participants. Submit proposed changes using the *Protocol Amendment Request Form*.
- o All research-related injuries, adverse events, or other unanticipated problems involving risks to participants or others must be reported in writing to the IRB Office within 72 hours of knowledge of the occurrence. All significant new findings that may affect risks to participation should be reported in writing to subjects and the IRB.
- o If the project will continue beyond the approval period, a continuing review report must be submitted by the due date indicated above in order to allow time for IRB review and approval prior to the expiration date. The IRB Office will typically send a reminder letter approximately one month before the report due date; however, timely submission of the report is your responsibility. Should IRB approval for the project lapse, recruitment of subjects and data collection must stop.
- o When the project is complete, a final project report is required so that IRB records can be inactivated. Federal regulations require that IRB records on a protocol be retained for three years following project completion. Both the continuing review report and the final report should be submitted according to instructions on the *Continuing Review Completion Report Form*.
- o Research records may be subject to a random or directed audit at any time to verify compliance with IRB regulations.

Thank you for cooperating with NDSU IRB policies, and best wishes for a successful study.

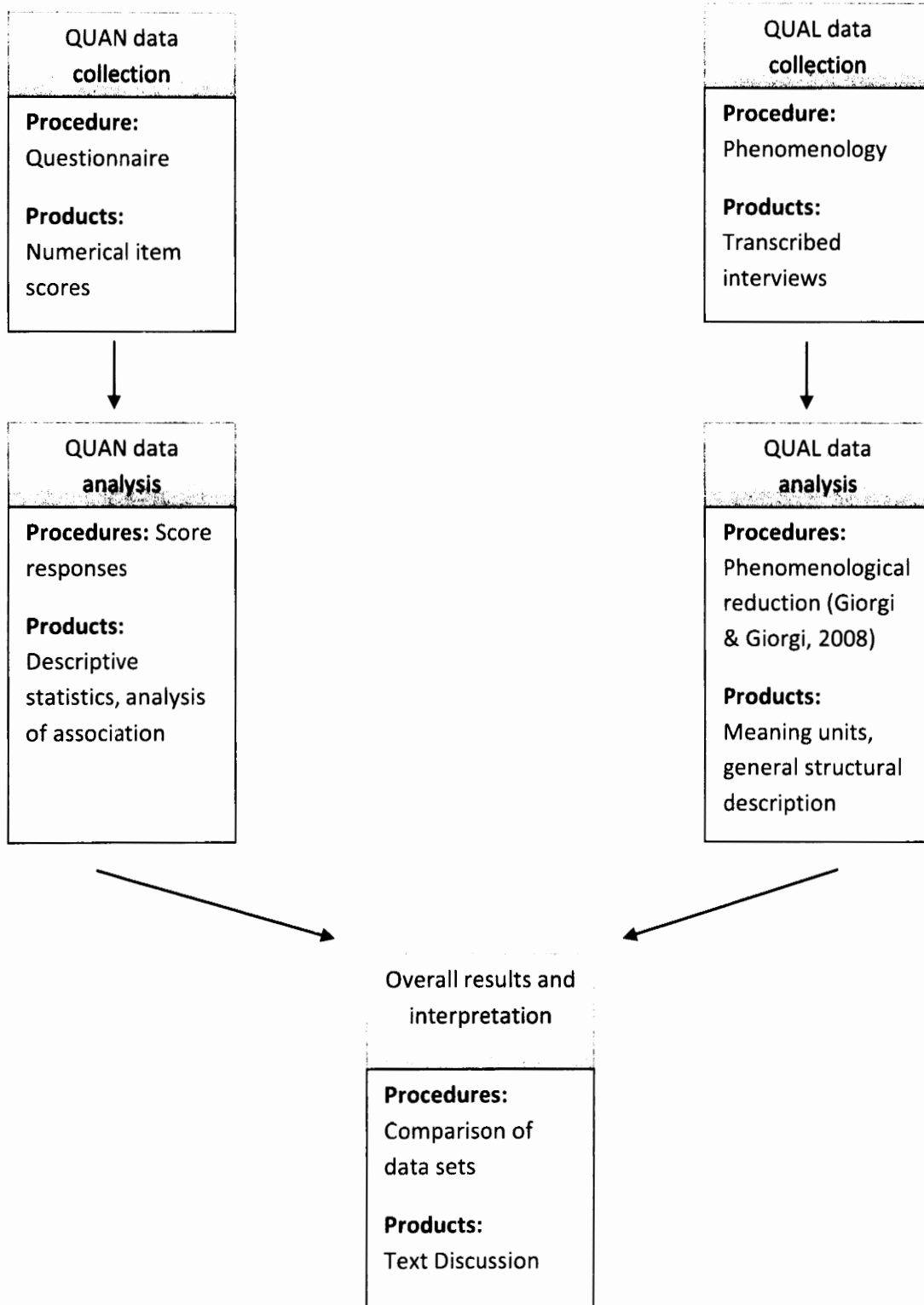
Sincerely,



Kristy Shirley, CIP  
 Research Compliance Administrator

161.231.2295

## APPENDIX B. MIXED-METHODS DIAGRAM



**APPENDIX C. LETTER FOR SOLICITING INTERVIEWS**

Dear (AOTA SIS Coordinator Name),

I am a doctoral student at North Dakota State University. I am currently studying the development of child psychosocial knowledge and attitudes of school-based occupational therapists. In order to develop this understanding, I am completing a mixed-methods study regarding the experiences of school-based occupational therapists in developing their child psychosocial knowledge and attitudes as well as the level of their child psychosocial knowledge and attitudes. For the qualitative portion of the study, it is my intent to interview therapists from across the country. Given your current position, it is likely that you are familiar with school-based therapists from across the country who might be willing to engage in this study. Specifically, I am hoping to conduct interviews during the AOTA 2010 Annual Conference and Expo in Orlando, FL.

It is my hope that you would nominate 3-6 school-based occupational therapists whom I might interview at the conference. If you are unsure about identifying specific names, it is my hope that you might provide contacts who would facilitate the identification of school-based occupational therapists who will be attending the AOTA Conference and Expo. Research participants (subjects) will be assured anonymity in all published accounts of the research as well as confidentiality of the interview data.

I appreciate your time and willingness to assist me in this study. If you are willing to assist me, please complete the form below and return to

Sarah Nielsen  
1017 6<sup>th</sup> St. SW  
Minot, ND 58701

Or email to [snielsen@medicine.nodak.edu](mailto:snielsen@medicine.nodak.edu)

I appreciate your contribution to this research and look forward to your response.

Sincerely,

Sarah Nielsen, ABD, MGMT, OTR/L

**Nomination Form**

| Therapist Name | Mailing and Email Address | Telephone |
|----------------|---------------------------|-----------|
| 1.             |                           |           |
| 2.             |                           |           |
| 3.             |                           |           |
| 4.             |                           |           |
| 5.             |                           |           |
| 6.             |                           |           |

Submitted by:

### Posting to AOTA OT Connections Listserve

Personal communication, C. Foster, AOTA, December 2, 2009, regarding policy for using AOTA Connections:

Sections from Terms of Agreement:

- *The Forums may not be used as a primary source to conduct research although members may post notices of research studies and inform members that wish to participate who to contact and how to enroll.*
- *The Forums may not be used to post surveys. Members who are interested in publicizing a survey or who are soliciting participants may do a posting of 2-3 sentences which announce/summarize the survey, provide a link to the survey and private contact information (e-mail or phone) for reader follow up.*

Propose posting for soliciting interviews for AOTA Conference.

I am completing a study regarding the psychosocial knowledge and attitudes of school-based occupational therapists. As a part of this study, I am looking for school-based therapists who would be willing to participate in a 60-90 minute interview at the 2010 AOTA Conference and Expo. If you have further questions about my study or you are willing to participate or know someone who might be willing to participate, please contact me. Sarah Nielsen [snielsen@medicine.nodak.edu](mailto:snielsen@medicine.nodak.edu), 701 857-2719.

## APPENDIX D. INTERVIEW QUESTIONS

### Initial Interview Format

**Introduction:** “I want to first say thank you for your willingness to participate in this research project. During today’s interview, I have several questions I will be asking you. The interview will take approximately 60-90 minutes. Before we begin, I have a consent form I would like you to sign, giving me permission to use the content of this interview in my research project.”

“Now, as we begin the interview, I ask that, if any time during the interview you have any questions or would like a question clarified or rephrased, that you will feel free to ask. Do you have any questions before we begin?”

**Demographic Questions:** “The first set of questions is designed to get to know you as an occupational therapist.”

1. Would you please tell me your name, age, and number of years in practice?
2. Could you describe your current work in the school-based practice setting?
3. Have you been employed as an OT in any other settings? If so, could you tell me about them?
4. During your academic training, did you complete a mental health fieldwork, and if so, was it child or adult?
5. Finally, what is your highest academic degree?

“During the remainder of today’s interview, we will be discussing your experience in developing child mental health knowledge and attitudes; again, at any time you have questions, please feel free to ask.” For the purpose of this interview, I will refer to children with emotional disturbance being consistent with IDEA and its definition of emotional disturbance.

### **General Attitudes:**

Tell me about experiences you have had in working with children who have emotional disturbance.

Potential follow ups:

What was this like?

How did you feel about this experience?

How did you deal with the challenges?

**General Knowledge**

Tell me about your experiences in developing child mental health knowledge.

If appropriate, follow up with these questions:

Tell me more about your academic experience.

Tell me more about your fieldwork experience.

Tell me more about your practice experiences.

Tell me more about your continuing education experiences.

Can you provide specific examples of experiences that impacted the development of your knowledge?

What were these like?

How were they beneficial?

How could they be improved?

**Closure:** “Thank you, once again, for taking the time for this interview. I truly appreciate you for your contribution to this research project. I would like to contact you again later to have you review the transcript of this interview for accuracy, if that is agreeable to you. Rest assured that your anonymity will be protected throughout the process. Thank you for helping me to learn more about the development of child mental health knowledge and attitudes in school-based occupational therapists.”

## APPENDIX E. CONSENT TO PARTICIPATE IN RESEARCH

### A Quantitative and Qualitative Inquiry Into the Impact of Academic Curriculum, Degree Level, Fieldwork Experience, and Professional Experience on School-Based Occupational Therapists' Psychosocial Knowledge and Attitudes

**Research Study/Purpose:** You are invited to participate in a research study of school-based occupational therapists' knowledge and attitudes being conducted by Sarah Nielsen, OTR/L, who is affiliated with North Dakota State University. The purpose of the study is to understand how school-based occupational therapists have developed child psychosocial knowledge and attitudes as well as their current knowledge and attitudes.

**Explanation of Procedures:** If you agree to participate in the study, you will be interviewed on one occasion for approximately 60-90 minutes. The interview will discuss your experience in developing child psychosocial knowledge and attitudes. The interview will be recorded, transcribed, and then coded. The tape and transcription will be destroyed once coded. Your name will not be on the transcribed data.

**Potential Risks and Discomforts:** The risk of breaching confidentiality will be minimized by not storing your name with the transcribed data. The audio tape and transcribed report will be destroyed once the data are coded. It is not possible to identify all potential risk in research procedures, but the researchers have taken reasonable safeguards to minimize any known risks to the participant.

**Potential Benefits:** The benefit of this study will be understanding how school-based occupational therapists have developed child psychosocial knowledge in the past and specifically what experiences have affected knowledge and attitudes. By understanding therapists' experiences, the education of both practicing and future occupational therapists could be improved. However, you may not get any benefit from being in this research study.

**Assurance of Confidentiality:** Confidentiality will be assured by not recording your name with any transcribed data. In addition, the audio tape and transcribed file will be destroyed. Field notes will not contain any names or institutions.

**Voluntary Participation and Withdrawal from the Study:** Your participation is voluntary and you may quit at any time. Your decision whether or not to participate will not affect your relationship with NDSU. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time.

**Offer to Answer Questions:** You should feel free to ask questions now or at any time during the study. If you have any questions about this study, you can contact the principal investigator Dr. Kathy Enger at 701 231-5776 or the co-investigator Sarah Nielsen, OTR/L at 701 857-2719. If you have questions about the rights of human research participants, or wish to report a research-related problem or injury, contact the NDSU IRB Office at (701) 231-8908 or [ndsu.irb@ndsu.edu](mailto:ndsu.irb@ndsu.edu).

#### **Consent Statement**

**By signing this form, you are stating that you have read and understand this form and the research project, and are freely agreeing to be a part of this study. If there are things you do not understand about the study, please ask the researchers before you sign the form. You will be given a copy of the entire consent form to keep.**

---

Participant's Signature

Printed Name

Date

---

Researcher obtaining consent:

Signature

Printed Name

Date



## APPENDIX F. QUALITATIVE DATA ANALYSIS GRID

|   |   |                                  |
|---|---|----------------------------------|
| <b>Participant</b><br>S= Sarah/researcher |   |                                  |
| <b>Meaning Unit</b>                       | <b>Transformation</b><br><b>(to language of researcher)</b> | <b>Synthesis, if appropriate</b> |
|   |   |                                  |

**Method and form for analysis taken from:** Giorgi, A., & Giorgi, B. (2008). Phenomenology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed., pp. 26-52). Thousand Oaks, CA: Sage Publications.

|   |   |  |
|---|---|--|
| <p><b>Participant Nine (P9)</b></p> <p>S= Sarah/researcher</p>  |   |  |
| <p><b>Meaning Unit</b></p>  | <p><b>Transformation (to language of researcher)</b></p>  | <p><b>Synthesis, if appropriate</b></p>  |
| <p>1. S: I want to ask you what emotional disturbance for children means to you?</p> <p>P9: Well, that is an interesting question because I'm actually working with a student right now who, that the district is suing the family because they have pulled him out of school. They see him as twice exceptional and the school sees him as emotionally disturbed and they want to give him that label and give him a classroom placement that the family doesn't agree with, so right now it is a pretty loaded term for me because the family is really balking at having that label, so I tend to refer to kids having psychosocial issues rather than being emotionally disturbed because I think that one is really hard for families.</p> | <p>1. P9 is stating that she has personal experience with the term emotional disturbance. Using the words "loaded term," "label," "really hard for families" and reporting on litigation issues surrounding the term. P9 is suggesting she feels frustration with the term emotional disturbance preferring that instead another term, "kids with psychosocial issues" be used.</p> | <p>1+4+5+7+25 suggest that P9 feels a stigma associated with emotional disturbance so much that she feels a sense of self-fulfilling prophecy that comes along with that stigma as well as limited services an options for these children.</p> |

|   |  |  |
|---|--|--|
| <p><b>2. S:</b> And when you think of that label in the schools, what kind of diagnoses would you think that would cover?</p> <p><b>P9:</b> Umm. I think it actually, in my experience, sort of applies to that catch all of kids that don't fit any other diagnosis, so if they don't have Autism, if they don't have identified specific learning disabilities, if they don't have any other diagnoses but they are unmanageable in the classroom then they are emotionally disturbed.</p>                  | <p><b>2.</b> When asked to identify diagnoses that belong to the category of emotional disturbance instead of labeling diagnoses P9 is using the term "catch all" suggesting that in her experience she has seen kids who don't fit anywhere else being labeled as emotional disturbed. She does state that they are unmanageable in the classroom and this appears to be key to being labeled emotionally disturbed.</p>  | <p><b>2+3+11</b> P9 is feeling that those children labeled emotional disturbed are those that do not fit neatly somewhere else in categories under IDEA. She is expressing frustration with a "catch all" category for children who have significant, complex amounts of needs all being served in one room.</p> |
| <p><b>3. P9:</b> For a long time I worked with the county in my area who got all the, at that time, you know five ten years ago, got all the children who had significant, complex amounts of need and so there was a classroom set up for them and the ED classrooms always seemed to be this mismatch of kids who didn't fit anywhere else. So it is sort of the catch all for kids that didn't fit anywhere else. I would say the common denominator those kids tended to have were behavioral issues.</p> | <p><b>3.</b> Here P9 is drawing from here experience. She describes children with emotional disturbance as having significant, complex amounts of need who accessed special classrooms set up for them, ED classrooms. Yet, she describes these classrooms as "mismatch of kids" that don't fit anywhere else suggesting that a mismatch would mean many variety of needs in one room. Again she refers to the common denominator as behavioral issues (whatever the reason as she suggests a mismatch of kids which implies that behaviors are not caused by the same underlying issues).</p> |  |

|  |  |  |
|--|--|--|
| <p><b>4. P9:</b> So they acted out, they were the problem kids in the class.</p>   | <p><b>4.</b> “problem kids in the class” again suggesting a stereotype of this population and what would give them the label emotional disturbance</p>   |  |
| <p><b>5.P9:</b> If you are looking for a disorder possibly oppositional defiant disorder or conduct disorder, or adjustment disorders, some attachment disorders, some kids that were either drug or alcohol influenced as babies, so and then you know in California certainly we have a really diverse socioeconomic, cultural/racial makeup in our communities in which I work and so it was an unusually high percentage of kids that were non-white and boys.</p> | <p><b>5.</b> Here again P9 is reporting a “catch all” in terms of her experience of children being served under the category of emotional disturbance. She is reporting disorders of disruptive behavior, attachment issues (RAD), to fetal alcohol, and finally to socioeconomic, race/cultural. She also states a high percentage were non-white/boys suggesting she feels this population may be over represented, again a stereotype possibly present.</p> |  |

**APPENDIX H. PERMISSION TO MODIFY INSTRUMENT**

**Date:** Wed, 16 Dec 2009 13:37:09 -0600 [12/16/2009 01:37PM CST]

**From:** Morris, Edwin Frank <MorrisEF@missouri.edu>

**To:** Sarah Nielsen <snielsen@medicine.nodak.edu>

**Subject:** RE: Seeking information on Morris 2002 Dissertation

Sarah,

You have my permission to use the instrument and modify it to suit your study. Of course, when you change the sample then the factors and item scores may differ from those I found, but that is also an interesting finding. So, I would appreciate it, if you would keep me posted on your work. If you want to talk sometime then maybe we can connect after the holidays. I will be happy to review the reverse scoring items with you later. Of course, you can avoid that by rewording the items if you want.

I believe it is useful to have some items that are reverse stated because it ensures that respondents read each item carefully.

What is your basic hypothesis? What are you expecting from the OT sample? I would assume they are better prepared regarding children's mental health than elementary teachers. What are you thinking?

Ed

**APPENDIX I. TEACHER MENTAL HEALTH OPINION INVENTORY**  
(Morris, 2002)

| <b>To the right of each statement please circle the number that best describes your opinion.</b>                   | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1. Cultural differences account for some variations in childhood behavior.   | 1                        | 2               | 3              | 4            | 5                     |
| 2. People with attention-deficit/hyperactivity disorder (ADHD) have changes in behavior and thinking.              | 1                        | 2               | 3              | 4            | 5                     |
| 3. Children (K-6) with epilepsy carefully controlled by medication can perform as well in school as their peers.   | 1                        | 2               | 3              | 4            | 5                     |
| 4. Alzheimer's disease is common in elementary (K-6) school children.  | 1                        | 2               | 3              | 4            | 5                     |
| 5. Elementary (K-6) school age students do not commit suicide.   | 1                        | 2               | 3              | 4            | 5                     |
| 6. I am not comfortable being around children (K-6) who have mental illness.                                       | 1                        | 2               | 3              | 4            | 5                     |
| 7. Elementary (K-6) school teachers should not be expected to work with parents of children with mental illness.   | 1                        | 2               | 3              | 4            | 5                     |
| 8. Prevention programs can aid in early identification of mental illness.  | 1                        | 2               | 3              | 4            | 5                     |
| 9. Elementary (K-6) students can be diagnosed with depression.   | 1                        | 2               | 3              | 4            | 5                     |
| 10. Children (K-6) respond just like adults to psychiatric medications.  | 1                        | 2               | 3              | 4            | 5                     |
| 11. Many psychiatric conditions are due to biochemical imbalances in the brain.                                    | 1                        | 2               | 3              | 4            | 5                     |
| 12. Fecal soiling (inability to control bowels) is usually diagnosed before three years of age.                    | 1                        | 2               | 3              | 4            | 5                     |
| 13. Schools cannot afford to pay for the mental health services that children need.                                | 1                        | 2               | 3              | 4            | 5                     |
| 14. Low intelligence can be improved with medicine.  | 1                        | 2               | 3              | 4            | 5                     |
| 15. Other elementary (K-6) students need to be protected from peers with mental illness.                           | 1                        | 2               | 3              | 4            | 5                     |
| 16. Thorough assessments for children (K-6) with mental illness consider strengths and needs, as well as deficits. | 1                        | 2               | 3              | 4            | 5                     |
| 17. Bullying is a warning sign of mental illness in elementary (K-6) school students.                              | 1                        | 2               | 3              | 4            | 5                     |
| 18. Mental health workers use too much jargon.   | 1                        | 2               | 3              | 4            | 5                     |

| <b>To the right of each statement please circle the number that best describes your opinion.</b>  | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| 19. Mental health workers fail to hold children (K-6) accountable for their behavior.   | 1                        | 2               | 3              | 4            | 5                     |
| 20. Stammering or stuttering may be due to emotional reasons.   | 1                        | 2               | 3              | 4            | 5                     |
| 21. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impair functioning. | 1                        | 2               | 3              | 4            | 5                     |
| 22. There is no "one size fits all" treatment for mental disorders.   | 1                        | 2               | 3              | 4            | 5                     |
| 23. Nearly half of all Americans who have a mental illness do not seek treatment.   | 1                        | 2               | 3              | 4            | 5                     |
| 24. Mental illness is the second leading cause of disability and early death in the United States.  | 1                        | 2               | 3              | 4            | 5                     |
| 25. Adolescent males (15-19) are at high risk of suicide.   | 1                        | 2               | 3              | 4            | 5                     |
| 26. Most people occasionally have thoughts or feelings similar to people with diagnosable mental illness.   | 1                        | 2               | 3              | 4            | 5                     |
| 27. Teachers (K-6) are not paid enough to have to teach children with mental illness.   | 1                        | 2               | 3              | 4            | 5                     |
| 28. The symptoms of separation anxiety are normal in early childhood but are signs of distress in later childhood and beyond.                                       | 1                        | 2               | 3              | 4            | 5                     |
| 29. Mental illness is difficult to understand because of the over-use of specialized terms.   | 1                        | 2               | 3              | 4            | 5                     |
| 30. Children (K-6) with ADHD are skilled at organizing their classroom work.  | 1                        | 2               | 3              | 4            | 5                     |
| 31. Students (K-6) with mental illness are poorly motivated.  | 1                        | 2               | 3              | 4            | 5                     |
| 32. Children (K-6) with mental illness are frightening to other students.   | 1                        | 2               | 3              | 4            | 5                     |
| 33. Most mental illness can be linked to a specific gene.   | 1                        | 2               | 3              | 4            | 5                     |
| 34. A tic is a sudden, recurrent, stereotyped motor movement or vocalization.   | 1                        | 2               | 3              | 4            | 5                     |
| 35. Children (K-6) with an oppositional defiant disorder have a pattern of negativistic and hostile behavior lasting at least 6 months.                             | 1                        | 2               | 3              | 4            | 5                     |

| To the right of each statement please circle the number that best describes your opinion.               | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| 36. Other students (K-6) do not accept peers with mental illness.                                       | 1                 | 2        | 3       | 4     | 5              |
| 37. Working with elementary (K-6) student with mental illness puts teachers in the role of a therapist. | 1                 | 2        | 3       | 4     | 5              |
| 38. Teachers (K-6) need to be careful what they say around students with mental illness.                | 1                 | 2        | 3       | 4     | 5              |
| 39. Tourettes Disorder is caused by the direct physiological effects of substance abuse.                | 1                 | 2        | 3       | 4     | 5              |
| 40. Teachers (K-6) are asked to teach some children who should not even be in public school.            | 1                 | 2        | 3       | 4     | 5              |

1. Please mark an X in the box to indicate your gender:

|        |                          |
|--------|--------------------------|
| Male   | <input type="checkbox"/> |
| Female | <input type="checkbox"/> |

2. Please mark an X in the box to indicate your racial/ethnic background:

|                  |                          |
|------------------|--------------------------|
| Caucasian        | <input type="checkbox"/> |
| African-American | <input type="checkbox"/> |
| Hispanic         | <input type="checkbox"/> |
| Asian            | <input type="checkbox"/> |
| Other            | <input type="checkbox"/> |

3. Please mark an X in the box to indicate your martial status:

|          |                          |
|----------|--------------------------|
| Single   | <input type="checkbox"/> |
| Married  | <input type="checkbox"/> |
| Divorced | <input type="checkbox"/> |
| Widowed  | <input type="checkbox"/> |

4. Please mark an X in the box that best describes your level of experience:

|   |                          |
|---|--------------------------|
| Entry level college student                   | <input type="checkbox"/> |
| Advanced college student                      | <input type="checkbox"/> |
| Bachelors Degree                              | <input type="checkbox"/> |
| Masters Degree                                | <input type="checkbox"/> |
| Masters Degree plus additional graduate hours | <input type="checkbox"/> |

5. Please write in your age \_\_\_\_\_.



**APPENDIX J. OCCUPATIONAL THERAPY CHILD  
MENTAL HEALTH QUESTIONNAIRE**

| <b>To the right of each statement please circle the number that best describes your opinion.</b>                   | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1. Cultural differences account for some variations in childhood behavior.   | 1                        | 2               | 3              | 4            | 5                     |
| 2. People with attention-deficit/hyperactivity disorder (ADHD) have changes in behavior and thinking.              | 1                        | 2               | 3              | 4            | 5                     |
| 3. Children (K-6) with epilepsy carefully controlled by medication can perform as well in school as their peers.   | 1                        | 2               | 3              | 4            | 5                     |
| 4. Alzheimer's disease is common in elementary (K-6) school children.  | 1                        | 2               | 3              | 4            | 5                     |
| 5. Elementary (K-6) school age students do not commit suicide.   | 1                        | 2               | 3              | 4            | 5                     |
| 6. I am not comfortable being around children (K-6) who have mental illness.                                       | 1                        | 2               | 3              | 4            | 5                     |
| 7. Occupational therapists should not be expected to work with parents of children with mental illness.            | 1                        | 2               | 3              | 4            | 5                     |
| 8. Prevention programs can aid in early identification of mental illness.  | 1                        | 2               | 3              | 4            | 5                     |
| 9. Elementary (K-6) students can be diagnosed with depression.   | 1                        | 2               | 3              | 4            | 5                     |
| 10. Children (K-6) respond just like adults to psychiatric medications.  | 1                        | 2               | 3              | 4            | 5                     |
| 11. Many psychiatric conditions are due to biochemical imbalances in the brain.                                    | 1                        | 2               | 3              | 4            | 5                     |
| 12. Fecal soiling (inability to control bowels) is usually diagnosed before three years of age.                    | 1                        | 2               | 3              | 4            | 5                     |
| 13. Schools cannot afford to pay for the mental health services that children need.                                | 1                        | 2               | 3              | 4            | 5                     |
| 14. Low intelligence can be improved with medicine.  | 1                        | 2               | 3              | 4            | 5                     |
| 15. Other elementary (K-6) students need to be protected from peers with mental illness.                           | 1                        | 2               | 3              | 4            | 5                     |
| 16. Thorough assessments for children (K-6) with mental illness consider strengths and needs, as well as deficits. | 1                        | 2               | 3              | 4            | 5                     |
| 17. Bullying is a warning sign of mental illness in elementary (K-6) school students.                              | 1                        | 2               | 3              | 4            | 5                     |
| 18. Mental health workers use too much jargon.   | 1                        | 2               | 3              | 4            | 5                     |

| <b>To the right of each statement please circle the number that best describes your opinion.</b>  | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly Agree</b> |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| 19. Mental health workers fail to hold children (K-6) accountable for their behavior.   | 1                        | 2               | 3              | 4            | 5                     |
| 20. Stammering or stuttering may be due to emotional reasons.   | 1                        | 2               | 3              | 4            | 5                     |
| 21. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impair functioning. | 1                        | 2               | 3              | 4            | 5                     |
| 22. There is no "one size fits all" treatment for mental disorders.   | 1                        | 2               | 3              | 4            | 5                     |
| 23. Nearly half of all Americans who have a mental illness do not seek treatment.   | 1                        | 2               | 3              | 4            | 5                     |
| 24. Mental illness is the second leading cause of disability and early death in the United States.  | 1                        | 2               | 3              | 4            | 5                     |
| 25. Adolescent males (15-19) are at high risk of suicide.   | 1                        | 2               | 3              | 4            | 5                     |
| 26. Most people occasionally have thoughts or feelings similar to people with diagnosable mental illness.   | 1                        | 2               | 3              | 4            | 5                     |
| 27. Occupational therapists are not paid enough to have to teach children with mental illness.  | 1                        | 2               | 3              | 4            | 5                     |
| 28. The symptoms of separation anxiety are normal in early childhood but are signs of distress in later childhood and beyond.                                       | 1                        | 2               | 3              | 4            | 5                     |
| 29. Mental illness is difficult to understand because of the over-use of specialized terms.   | 1                        | 2               | 3              | 4            | 5                     |
| 30. Children (K-6) with ADHD are skilled at organizing their classroom work.  | 1                        | 2               | 3              | 4            | 5                     |
| 31. Students (K-6) with mental illness are poorly motivated.  | 1                        | 2               | 3              | 4            | 5                     |
| 32. Children (K-6) with mental illness are frightening to other students.   | 1                        | 2               | 3              | 4            | 5                     |
| 33. Most mental illness can be linked to a specific gene.   | 1                        | 2               | 3              | 4            | 5                     |
| 34. A tic is a sudden, recurrent, stereotyped motor movement or vocalization.   | 1                        | 2               | 3              | 4            | 5                     |

| To the right of each statement please circle the number that best describes your opinion.   | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| 35. Children (K-6) with an oppositional defiant disorder have a pattern of negativistic and hostile behavior lasting at least 6 months. | 1                 | 2        | 3       | 4     | 5              |
| 36. Other students (K-6) do not accept peers with mental illness.   | 1                 | 2        | 3       | 4     | 5              |
| 37. Working with elementary (K-6) student with mental illness puts occupational therapists in the role of a psychotherapist.            | 1                 | 2        | 3       | 4     | 5              |
| 38. Occupational therapists need to be careful what they say around students with mental illness.                                       | 1                 | 2        | 3       | 4     | 5              |
| 39. Tourettes Disorder is caused by the direct physiological effects of substance abuse.  | 1                 | 2        | 3       | 4     | 5              |
| 40. Occupational therapists are asked to teach some children who should not even be in public school.                                   | 1                 | 2        | 3       | 4     | 5              |
| 41. My occupational therapy academic course content included child mental health.   | 1                 | 2        | 3       | 4     | 5              |
| 42. During my <b>non-mental health fieldwork</b> , I regularly applied psychosocial knowledge with my clients.                          | 1                 | 2        | 3       | 4     | 5              |
| 43. Since graduating, I have participated in continuing education related to child mental health  | 1                 | 2        | 3       | 4     | 5              |
| 44. Child mental health continuing education has prepared me to work with children with emotional disturbances                          | 1                 | 2        | 3       | 4     | 5              |
| 45. My professional practice experiences have prepared me to work with children with emotional disturbances                             | 1                 | 2        | 3       | 4     | 5              |

**Additional data:**

**46. Did you complete a mental health fieldwork? (circle)**

Yes                      No

**47. What is your level of academic preparation? (circle)**

Bachelors      Masters      Doctorate

**48. Please write in your years in practice \_\_\_\_\_.**

**49. Please circle your age range:    22-30    31-40    41-50    51-60    61 and over**

**50. Gender (circle): Male    Female**

**51. Please circle your racial/ethnic background:**

**White            Black            Asian Indian            Chinese            Filipino    Japanese**  
**Korean            Vietnamese    Native Hawaiian            Guamanian or Chamorro    Samoan**  
**Native American            Other \_\_\_\_\_**

Items 1-40 adapted from: Morris, E. F. (2002). *A study of mental health knowledge and attitudes of preservice and inservice elementary school teachers*. Unpublished doctoral dissertation. University of Missouri-Columbia.

## APPENDIX K. SURVEY COVER LETTER

Dear School-Based Occupational Therapist,

I am a doctoral student at North Dakota State University. I am studying the child psychosocial knowledge and attitudes of school-based occupational therapists as well as factors that may have affected the development of knowledge and attitudes. My intent is to develop an understanding of the current level of child psychosocial knowledge and attitudes along with therapists' experience in developing them in order to impact continuing education opportunities for practicing therapists and the academic educational experiences of occupational therapy students. The enclosed questionnaire is designed to obtain information from you about your knowledge, attitudes, and experiences. This study has been accepted by the university's Institutional Review Board.

I would appreciate completion of the questionnaire by \_\_\_\_\_. I have provided a stamped, addressed envelope for you to use in returning the questionnaire. You do not need to put your name on the questionnaire. Please note that return envelopes do contain a number for tracking questionnaires that are not returned so that a follow up mailing can be completed. To protect against the potential risk of identifying individual responses, the envelopes will be destroyed immediately and your questionnaire answers will not be connected to your name. Your individual responses will be kept confidential. In addition, data will be reported as group data versus individual data. It is not possible to identify all potential risks in research procedures, but the researchers have taken reasonable safeguards to minimize any known risks to the participant. The benefit of the study is that by obtaining an understanding of practicing school-based therapists' current psychosocial knowledge and attitudes, as well as factors that impact it, future education and continuing education opportunities may be improved. However, you may not get any benefit from being in this research study.

I realize that your schedule is busy and that your time is valuable. However, I hope that the 20 minutes it will take you to complete the questionnaire will help lead to improvements in the educational opportunities for both practicing therapists and students. Thank you in advance for your participation. If you have questions about the study you may contact the principal investigator Dr. Kathy Enger at 701 231-5776 or [Kathy.Enger@ndsu.edu](mailto:Kathy.Enger@ndsu.edu) or me, the co-investigator, at 701 857-2719 or [snielsen@medicine.nodak.edu](mailto:snielsen@medicine.nodak.edu). If you have questions about your rights as participant or wish to make a complaint please contact NDSU Human Research Protection Program at 701.231.8908 or [ndsu.irb@ndsu.edu](mailto:ndsu.irb@ndsu.edu). By completing this survey, you are indicating your consent to participate in the research.

Sincerely,

Sarah Nielsen, MMT, OTR/L

## Second Mailing Letter

Dear School-Based Occupational Therapist,

Recently, you received a mailing and follow-up postcard regarding a study I am completing as a doctoral student at North Dakota State University. If you completed that survey and have returned it, please disregard this letter and survey. If you have not completed the survey, I ask that you consider taking the time to do so as your knowledge is important.

I am a doctoral student at North Dakota State University. I am studying the child psychosocial knowledge and attitudes of school-based occupational therapists as well as factors that may have affected the development of knowledge and attitudes. My intent is to develop an understanding of the current level of child psychosocial knowledge and attitudes along with therapists' experience in developing them in order to impact continuing education opportunities for practicing therapists and the academic educational experiences of occupational therapy students. The enclosed questionnaire is designed to obtain information from you about your knowledge, attitudes, and experiences. This study has been accepted by the university's Institutional Review Board.

I would appreciate completion of the questionnaire by \_\_\_\_\_. I have provided a stamped, addressed envelope for you to use in returning the questionnaire. You do not need to put your name on the questionnaire. Please note that return envelopes do contain a number for tracking questionnaires that are not returned so that a follow up mailing can be completed. To protect against the potential risk of identifying individual responses, the envelopes will be destroyed immediately and your questionnaire answers will not be connected to your name. Your individual responses will be kept confidential. In addition, data will be reported as group data versus individual data. It is not possible to identify all potential risks in research procedures, but the researchers have taken reasonable safeguards to minimize any known risks to the participant. The benefit of the study is that by obtaining an understanding of practicing school-based therapists' current psychosocial knowledge and attitudes, as well as factors that impact it, future education and continuing education opportunities may be improved. However, you may not get any benefit from being in this research study.

I realize that your schedule is busy and that your time is valuable. However, I hope that the 20 minutes it will take you to complete the questionnaire will help lead to improvements in the educational opportunities for both practicing therapists and students. Thank you in advance for your participation. If you have questions about the study you may contact the principal investigator Dr. Kathy Enger at 701 231-5776 or [Kathy.Enger@ndsu.edu](mailto:Kathy.Enger@ndsu.edu) or me, the co-investigator, at 701 857-2719 or [snielsen@medicine.nodak.edu](mailto:snielsen@medicine.nodak.edu). If you have questions about your rights as participant or wish to make a complaint please contact NDSU Human Research Protection Program at 701.231.8908 or [ndsu.irb@ndsu.edu](mailto:ndsu.irb@ndsu.edu). By completing this survey, you are indicating your consent to participate in the research.

Sincerely,

Sarah Nielsen, MMT, OTR/L

**APPENDIX L. FOLLOW-UP POSTCARD**

In the last 10 days, you received a survey titled Occupational Therapy Child Mental Health Questionnaire. I want to thank you for your time in completing and returning the survey. If you have not done so, I encourage you to complete the survey because your knowledge is important. If you have misplaced the survey, another will follow in coming weeks. Sarah Nielsen, MMT, OTR/L, North Dakota State University graduate student, 701 857-2719 [snielsen@medicine.nodak.edu](mailto:snielsen@medicine.nodak.edu)



## APPENDIX M. TRANSCRIPTION REVIEW REQUEST

**Date:** Sat, 12 Jun 2010 16:10:48 -0500 [06/12/2010 04:10PM CST]  
**From:** Sarah Nielsen <snielsen@medicine.nodak.edu>  
**To:**   
**Subject:** Transcribed interview

 1 unnamed 2.42 KB

I hope all is well. I have completed the transcription of the interview you completed with me at conference. I would like to allow participants the opportunity to review the transcription. If I have typed/heard something incorrectly or you wanted to clarify anything I ask that you do so in the next 10 days and then return it to me via email. Again, thank you for participating in the study.

Sarah

**Date:** Sat, 12 Jun 2010 00:45:51 +0000 [06/11/2010 07:45PM CST]  
**From:**   
**To:** snielsen@medicine.nodak.edu  
**Subject:** RE: Transcript review for study  
**Part(s):**  2 70 KB

Download All Attachments (in .zip file) 

 1 unnamed 2.43 KB

Show this HTML in a new window?

Hi Sarah,  
 Good job with the transcript!! I've added a couple of things that I think I expressed badly! Hope it's clear now.  
 Have a good summer,


**Date:** Sun, 13 Jun 2010 12:45:27 -0400 [06/13/2010 11:45AM CST]  
**From:**   
**To:** Sarah Nielsen <snielsen@medicine.nodak.edu>  
**Subject:** Re: interview transcription  
 HI Sarah,

I read through everything. The only thing I'd ask is that you remove the student's name "██████" from the longer paragraph on page 13. Thanks so much & good luck with everything!



## APPENDIX N. INTERVIEW SUMMARY REVIEW REQUEST

**Date:** Sat, 11 Sep 2010 16:58:57 -0500 [09/11/2010 04:58PM CST]  
**From:** Sarah Nielsen <snielsen@medicine.nodak.edu>  
**To:**  
**Subject:** Member Checking Follow Up


 1 Attachment (1.1 KB)

I hope all is well for you. I am in the member checking phase of my study. Attached you will find a two page document that includes your subject portrait and interview summary. I am hoping that in the next two weeks you might review this document, whether you agree or feel there should be changes to what I have written I would be grateful for an email response so that I know you if you have reviewed the document. This will help in establishing validity for the study. I thank you for your time and assistance in my study. Sarah Nielsen

**Date:** Sat, 11 Sep 2010 21:57:13 -0400 [09/11/2010 08:57PM CST]  
**From:**   
**To:** Sarah Nielsen <snielsen@medicine.nodak.edu>  
**Subject:** Re: member checking follow up

Hi Sarah,

Thank you for the reminder! I have read the document and found it to be an accurate description of my responses. Good luck

**Date:** Wed, 8 Sep 2010 13:56:46 -0500 [09/08/2010 01:56PM CST]  
**From:**   
**To:** snielsen@medicine.nodak.edu  
**Subject:** FW: member checking

**Part(s):**  2 membercheckingparticipant.doc 30 KB

Download All Attachments (in .zip file) 

 1 Attachment (30 KB)

Hi Sarah,

Congratulations on getting this far with your project! I'm sure it has been a long haul. This looks good with one minor revision (see attached).

Good luck!

**APPENDIX O. FIRST ROTATED MATRIX USING  
TWO COMPONENT STRUCTURE**

| Item (Original Construct<br>Denoted) | Component             |                      |
|--------------------------------------|-----------------------|----------------------|
|                                      | Component 1 Knowledge | Component 2 Attitude |
| Q1 (Knowledge)                       | .350                  |                      |
| Q2 (Knowledge)                       | .406                  |                      |
| Q3 (Knowledge)                       |                       | .302                 |
| Q4 (Knowledge)                       |                       | .255                 |
| Q5 (Knowledge)                       |                       | .193                 |
| Q6 (Attitude)                        |                       | .279                 |
| Q7 (Attitude)                        |                       | .322                 |
| Q8 (Knowledge)                       | .407                  |                      |
| Q9 (Knowledge)                       | .407                  |                      |
| Q10 (Knowledge)                      |                       | .319                 |
| Q11 (Knowledge)                      | .453                  |                      |
| Q12 (Knowledge)                      |                       | .226                 |
| Q13 (Attitude)                       |                       | -.295                |
| Q14 (Knowledge)                      |                       | .369                 |
| Q15 (Attitude)                       |                       | .422                 |
| Q16 (Knowledge)                      | .313                  | .313                 |
| Q17 (Knowledge)                      | .275                  |                      |
| Q18 (Attitude)                       | .158                  |                      |
| Q19 (Attitude)                       |                       | .360                 |
| Q20 (Knowledge)                      | .276                  |                      |
| Q21 (Knowledge)                      | .426                  |                      |
| Q22 (Knowledge)                      | .394                  |                      |
| Q23 (Knowledge)                      | .434                  |                      |
| Q24 (Knowledge)                      | .198                  |                      |
| Q25 (Knowledge)                      | .472                  |                      |
| Q26 (Knowledge)                      | .318                  |                      |

|                 |       |       |
|-----------------|-------|-------|
| Q27 (Attitude)  |       | -.572 |
| Q28 (Knowledge) | .318  |       |
| Q29 (Attitude)  |       | -.315 |
| Q30 (Knowledge) | .262  |       |
| Q31 (Attitude)  |       | .471  |
| Q32 (Attitude)  |       | .512  |
| Q33 (Knowledge) |       | .395  |
| Q34 (Knowledge) | .548  |       |
| Q35 (Knowledge) | .458  |       |
| Q36 (Attitude)  |       | -.457 |
| Q37 (Attitude)  |       | .351  |
| Q38 (Attitude)  | -.263 |       |
| Q39 (Knowledge) |       | .288  |
| Q40 (Attitude)  |       | .494  |

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Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Rotation converged in 3 iterations.

## APPENDIX P. PARALLEL ANALYSIS

Principal Components & Random Normal Data Generation

Specifications for this Run:

Ncases 565  
 Nvars 40  
 Ndatsets 100  
 Percent 95

Raw Data Eigenvalues, & Mean & Percentile Random Data Eigenvalues

| Root      | Raw Data | Means    | Prcntyle |
|-----------|----------|----------|----------|
| 1.000000  | 3.557144 | 1.543533 | 1.599894 |
| 2.000000  | 2.852841 | 1.483796 | 1.537853 |
| 3.000000  | 1.686268 | 1.439737 | 1.481296 |
| 4.000000  | 1.564849 | 1.397279 | 1.430286 |
| 5.000000  | 1.488747 | 1.361059 | 1.390436 |
| 6.000000  | 1.394606 | 1.327922 | 1.355636 |
| 7.000000  | 1.329858 | 1.298138 | 1.323722 |
| 8.000000  | 1.233209 | 1.269186 | 1.292289 |
| 9.000000  | 1.189287 | 1.240302 | 1.265595 |
| 10.000000 | 1.143115 | 1.215226 | 1.240513 |
| 11.000000 | 1.101848 | 1.190526 | 1.216623 |
| 12.000000 | 1.086445 | 1.165087 | 1.187515 |
| 13.000000 | 1.077242 | 1.140757 | 1.165495 |
| 14.000000 | 1.018710 | 1.117418 | 1.135621 |
| 15.000000 | 1.005338 | 1.092485 | 1.119052 |
| 16.000000 | .988370  | 1.072232 | 1.093306 |
| 17.000000 | .933883  | 1.050388 | 1.071437 |
| 18.000000 | .905359  | 1.029940 | 1.050112 |
| 19.000000 | .874987  | 1.010363 | 1.033992 |
| 20.000000 | .863288  | .989092  | 1.008910 |
| 21.000000 | .842862  | .970348  | .986776  |
| 22.000000 | .829580  | .949717  | .966503  |
| 23.000000 | .807976  | .930539  | .949443  |
| 24.000000 | .769699  | .908517  | .927725  |
| 25.000000 | .741154  | .890102  | .910621  |
| 26.000000 | .735069  | .870537  | .889971  |
| 27.000000 | .725691  | .850216  | .869366  |
| 28.000000 | .696530  | .829679  | .847921  |
| 29.000000 | .675121  | .810556  | .831460  |
| 30.000000 | .649087  | .792100  | .812037  |
| 31.000000 | .641567  | .772135  | .792710  |
| 32.000000 | .592709  | .751751  | .776883  |
| 33.000000 | .573361  | .732311  | .751868  |
| 34.000000 | .552524  | .710655  | .728959  |
| 35.000000 | .541207  | .692336  | .712123  |
| 36.000000 | .501104  | .670902  | .688527  |
| 37.000000 | .488557  | .648399  | .671051  |
| 38.000000 | .475479  | .623803  | .644062  |
| 39.000000 | .440312  | .596854  | .621141  |
| 40.000000 | .425015  | .564078  | .599999  |

**APPENDIX Q. ROTATED COMPONENT MATRIX**  
**USING SEVEN FACTORS**

|         | Component |       |      |      |       |      |       |
|---------|-----------|-------|------|------|-------|------|-------|
|         | 1         | 2     | 3    | 4    | 5     | 6    | 7     |
| Q1 (K)  | .567      |       |      |      |       |      |       |
| Q2 (K)  | .557      |       |      |      |       |      |       |
| Q3 (K)  | .348      |       |      |      |       |      |       |
| Q4 (K)  |           |       | .411 |      |       |      |       |
| Q5 (K)  |           |       | .339 |      |       |      |       |
| Q6 (A)  |           |       |      |      | .660  |      |       |
| Q7 (A)  |           |       |      |      | .436  |      |       |
| Q8 (K)  |           |       |      |      |       |      | -.490 |
| Q9 (K)  |           |       | .419 |      |       |      |       |
| Q10 (K) |           |       | .505 |      |       |      |       |
| Q11 (K) | .325      |       |      |      |       |      |       |
| Q12 (K) |           |       |      |      |       |      | .500  |
| Q13 (A) |           | -.416 |      |      |       |      |       |
| Q14 (K) |           |       |      |      |       |      | .450  |
| Q15 (A) |           | .413  |      |      |       |      |       |
| Q16 (K) | .408      |       |      |      |       |      |       |
| Q17 (K) |           |       |      | .335 |       |      |       |
| Q18 (A) |           |       |      |      |       | .703 |       |
| Q19 (A) |           | .389  |      |      |       |      |       |
| Q20 (K) | .382      |       |      |      |       |      |       |
| Q21 (K) | .416      |       |      |      |       |      |       |
| Q22 (K) | .431      |       |      |      |       |      |       |
| Q23 (K) |           |       |      | .634 |       |      |       |
| Q24 (K) |           |       |      | .628 |       |      |       |
| Q25 (K) |           |       |      | .575 |       |      |       |
| Q26 (K) |           |       |      | .291 |       |      |       |
| Q27 (A) |           | -.465 |      |      |       |      |       |
| Q28 (K) |           |       |      | .376 |       |      |       |
| Q29 (A) |           |       |      |      |       | .639 |       |
| Q30 (K) |           |       | .432 |      |       |      |       |
| Q31 (A) |           |       | .404 |      |       |      |       |
| Q32 (A) |           | .452  |      |      |       |      |       |
| Q33 (K) |           |       | .459 |      |       |      |       |
| Q34 (K) | .474      |       |      |      |       |      |       |
| Q35 (K) | .382      |       |      |      |       |      |       |
| Q36 (A) |           |       |      |      | -.532 |      |       |
| Q37 (A) |           | .444  |      |      |       |      |       |
| Q38 (A) |           | .414  |      |      |       |      |       |
| Q39 (K) |           |       | .541 |      |       |      |       |
| Q40 (A) |           | .672  |      |      |       |      |       |

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Rotation Converged in 13 iterations

K= knowledge item    A= attitude item

## APPENDIX R. FINAL KNOWLEDGE AND ATTITUDE COMPONENTS

### Component One: Knowledge

| Item   | Factor Loading | Mean score for item | SD for item |
|--|----------------|---------------------|-------------|
| 1. Cultural differences account for some variations in childhood behavior <b>(Knowledge)</b>   | .569           | 4.27                | .61         |
| 2. People with ADHD have changes in behavior and thinking <b>(Knowledge)</b>   | .556           | 4.21                | .66         |
| 3. Children (K-6) with epilepsy carefully controlled by medication can perform as well in school as their peers. <b>(Knowledge)</b>  | .347           | 4.21                | .77         |
| 11. Many psychiatric conditions are due to bio-chemical imbalances in the brain. <b>(Knowledge)</b>  | .337           | 4.13                | .77         |
| 16. Thorough assessments for children (K-6) with mental illness consider strengths and needs, as well as deficits. <b>(Knowledge)</b>  | .422           | 4.37                | .85         |
| 20. Stammering or stuttering may be due to emotional reasons <b>(Knowledge)</b>  | .379           | 3.77                | .71         |
| 21. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impair functioning. <b>(Knowledge)</b> | .410           | 4.15                | .51         |
| 22. There is no "one size fits all" treatment for mental disorders <b>(Knowledge)</b>  | .421           | 4.61                | .61         |
| 34. A tic is a sudden, recurrent, stereotyped motor movement or vocalization. <b>(Knowledge)</b>   | .477           | 4.25                | .62         |
| 35. Children (K-6) with oppositional defiant disorder have a pattern of negativist and hostile behavior lasting at least 6 months. <b>(Knowledge)</b>                                  | .374           | 3.89                | .70         |

### Component Two: Attitude

| Item   | Factor Loading | Mean score for item | SD for item |
|--|----------------|---------------------|-------------|
| 13. Schools cannot afford to pay for the mental health services that children need. <b>(Attitude)</b>      | -.435          | 3.22                | 1.13        |
| 15. Other elementary (K-6) students need to be protected from peers with mental illness. <b>(Attitude)</b> | .443           | 3.34                | 1.04        |
| 19. Mental health workers fail to hold children (K-6) accountable for their behavior. <b>(Attitude)</b>    | .392           | 3.53                | .76         |
| 27. Occupational therapists are not paid enough to have to   | -.482          | 1.81                | .87         |

|   |             |             |             |
|---|-------------|-------------|-------------|
| teach children with mental illness. <b>(Attitude)</b>   |             |             |             |
| 32. Children (K-6) with mental illness are frightening to other students. <b>(Attitude)</b>                             | <b>.505</b> | <b>3.00</b> | <b>.82</b>  |
| 38. Occupational therapists need to be careful what they say around students with mental illness. <b>(Attitude)</b>     | <b>.460</b> | <b>2.52</b> | <b>.85</b>  |
| 40. Occupational therapists are asked to teach some children who should not even be in public school. <b>(Attitude)</b> | <b>.664</b> | <b>3.82</b> | <b>1.13</b> |

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APPENDIX S. HISTOGRAMS

