SCHOOL-BASED OCCUPATIONAL THERAPY SERVICES
FOR STUDENTS WITH EMOTIONAL DISTURBANCE

A Thesis
Presented in Partial Fulfillment of the Requirements for
the Degree Master of Science in the
Graduate School of The Ohio State University

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ABSTRACT

With psychological and behavioral disorders affecting a significant number of children and adolescents in the nation's school systems, occupational therapy services to identify and provide effective intervention to meet the needs of students with emotional disturbance becomes important. The purpose of this study was to determine the extent to which occupational therapists provide services to students with emotional disturbance. Additionally, the study identified types of school-based occupational therapy services provided to students with emotional disturbance, examined service delivery approaches, explored occupational therapy practitioners’ perceptions of educational preparation for providing psychosocial occupational therapy services to students with emotional disturbance, and identified potential barriers to providing occupational therapy services to these students.

A national mail survey was sent to a random selection of 1,000 occupational therapists belonging to the American Occupational Therapy Association’s School System Special Interest Section. The response rate was 55.5% (n=555). Data were analyzed using means, frequencies, and percentages, in addition to descriptive analysis for qualitative responses.

The results of the study revealed that 64.8% of school-based occupational therapists had 0-5% of their caseload comprised of students with emotional disturbance. The mean percentage of students with emotional disturbance on school-based
occupational therapists caseloads was 8.2 (SD=13.9). Maintaining attention to task and motor skills were identified as the two goal areas most often addressed by occupational therapists when providing services to students with emotional disturbance. When working with students with emotional disturbance 68% (n=226) of respondents reported using therapeutic use of self either frequently or always. Additionally, 43.3% of those surveyed reported use of occupations and activities frequently with 37% reporting use always.

Qualitative answers identified use of sensory strategies, behavior modification/management, and social skills training as the top three intervention strategies used by occupational therapists to treat students with emotional disturbance. The service delivery most often used by occupational therapists was a combination of consultation and direct services (m=3.7, SD=1.04). A total of 334 therapists (66.5%) responded that their university preparation had prepared them minimally or not at all for providing school-based services for students with emotional disturbances. Many identified barriers to occupational therapy service provision to this population. Two themes were 1) lack of referral of children with emotional disturbance for occupational therapy evaluation/intervention and 2) limitations in the effectiveness of intervention. Finally, 129 (38.5%) of therapists reported that 50-75% of students receiving occupational therapy as a related service contributing to the IEP have shown positive outcomes due to intervention. The responses from this research study yielded some expected, disturbing and interesting results which provide implications for occupational therapy practice and warrant further discussion and need for additional research.
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CHAPTER 1

STATEMENT OF THE PROBLEM

Introduction

The profession of occupational therapy dates back prior to the 19th century, with the term "Occupational Therapy" coined very early in the 20th century (Patterson, 2002). Occupational therapy's roots stem from engagement in purposeful occupation being used as a treatment for people with mental illness (Patterson, 2002). The profession of occupational therapy has developed significantly over the last century, branching out from mental health institutions and hospitals into many practice areas such as physical rehabilitation, geriatrics, pediatrics, home health, and school-based practice. In the Scope of Practice (2004), The American Occupational Therapy Association (AOTA) defines 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, sensory 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 (AOTA, 2004).
Many federal laws have been passed and amended over the last thirty years to help ensure that every child with a disability receive a quality education. Several of these federal laws include: the Individuals with Disabilities Education Act – Part B (IDEA, 1977) with the most recent reauthorization of this law in 2004, the 1988 amendments of Section 504 of the Rehabilitation Act of 1973, No Child Left Behind Act of 2001, the amended Head Start Act, and the Assistive Technology Act of 1998. These legislative acts have had greatly impacted the delivery of occupational therapy services, making school-based occupational therapy practice the second largest practice area nationally for occupational therapy practitioners (AOTA, 2004). According to the American Occupational Therapy Association 2003 Member Survey, 34.4% of members indicated that their area of practice was in school systems.

Occupational therapy is identified in Part B of IDEA as one of the related services that may be required to assist a child with a disability to benefit from special education (Code of Federal Regulations [§300.24(a)]). Under the regulations of IDEA, the purpose of occupational therapy intervention is to help students in “(i) improving, developing or restoring functions impaired or lost through illness, injury or deprivation, (ii) improving ability to perform tasks for independent functioning when functions are impaired or lost, and (iii) preventing, through early intervention, initial or further impairment or loss of function.” More specifically, school-based occupational therapy services may include services such as intervention to address self-help skill development, sensory-motor processing, motor performance, life skills training and psychosocial adaptation (National Dissemination Center for Children with Disabilities
[NICHCY], Related Services, 2001). Some changes that came about with the reauthorization of IDEA in 2004 pertaining to the requirements for evaluation and individualized education plan content and services were expanded to require that a student’s developmental and functional needs, in addition to academic needs, be addressed (IDEA, 2004).

Occupational therapy practitioners are among only a few members of the IEP team who have an educational background in areas such as psychopathology, child development and neurology. This knowledge can guide them in understanding and providing intervention for children with emotional disturbances. Given the openness to special education laws and regulations, occupational therapists have the opportunity to use their skills as mental health professionals to assist children identified with emotional disturbances to function successfully within the school environment. Unfortunately, school-based occupational therapy practitioners are often viewed by team members as only being able to address problems that are motor or sensorimotor based in nature, which often limits occupational therapists from making a full contribution to the support of students’ psychosocial needs (Chandler, 2000). Many factors including lack of advocacy by school-based occupational therapy practitioners and misunderstanding by many IEP team members regarding the role of occupational therapists in facilitating and enabling students’ participation in the educational curriculum, limit occupational therapy practitioners from making the full contribution to assessment and treatment of children with emotional disturbances (Chandler, 2000).
Significance of the Problem

Psychological and behavioral disorders affect a significant number of children and adolescents. According to the National Dissemination Center for Children with Disabilities (2004), the number of children and youth with emotional disturbances who were provided special education and related services in public schools during the 2000-2001 school year was 473,663 individuals. Students identified as having Emotional Disturbance comprises the fourth largest special education disability category, following only students identified with specific learning disabilities, students with speech or language impairments and students with mental retardation (U.S. Department of Education, 2004). Davidson and LaVesser (1998) brought into focus how serious emotional disturbances can be when writing that “of all the medical and educational diagnoses of childhood, psychological and behavioral disorders are described as among the most devastating both to children and to others in the child’s environment, particularly parents, teachers and peers” (p. 3). These children often have difficulty functioning in formal education participation, an Area of Occupation encompassed in the Occupational Therapy Practice Framework: Domain and Process. Students with emotional disturbances may demonstrate client factors or have activity demands placed on them that can result in dysfunction in performance skills and performance patterns (AOTA, 2002). Some of the characteristics and behaviors seen in children who have emotional disturbances include hyperactivity, short attention span, impulsiveness, aggression, self-injurious behavior, withdrawal or difficulty engaging in social/group activities, immaturity, learning difficulties, difficulty following directions, and poor
organizational skills (Barnes, et. al. 2003; National Dissemination Center for Children with Disabilities, 2004).

Although the incidence of children receiving special education services for emotional disturbances is high and the profession of occupational therapy was built on a holistic approach to evaluation and treatment of individuals using purposeful engagement in occupations, often school-based occupational therapists overlook or do not address psychosocial factors. Curriculum and textbooks used in educational programs for training occupational therapy practitioners often contain minimal information on intervention for children with emotional disturbances or other psychosocial problems in comparison to information covered on other developmental disorders (Barnes, Beck, Vogel, Oxford & Murphy, 2003). Also, previous studies of occupational therapists caseloads in school-based settings have shown that children with physical impairments and mental retardation receive the majority of occupational therapy services (Barnes et al.).

The effectiveness of occupational therapy services provided to children with emotional disturbances in school-based or other settings where mental health issues are addressed is not known due to limited research (Barnes et al., 2003; Lougher, 2001). It is important for the profession to understand how psychosocial needs of students are being addressed in school-based settings so that best practice standards can be developed and followed.

**Purpose**

The purpose of this study is to build upon a study that was conducted in 2001
and published in 2003 by Barnes and colleagues to determine the extent to which occupational therapists provide services to students with emotional disturbances. Additionally, information obtained from this study will help identify the types of school-based occupational therapy services provided to students with emotional disturbances. The study will also examine the service delivery approaches used for children with emotional disturbances, explore occupational therapy practitioners' perceptions of educational preparedness for providing psychosocial occupational therapy services to students with emotional disturbances, and to give rise to potential barriers to providing occupational therapy services to these students.

**Objectives**

This study will address several questions presented to currently practicing school-based occupational therapists:

1) What is the percentage of students on school-based occupational therapists caseloads who have been identified as having emotional disturbances?

2) What performance skills and client factors most often affect school functioning in students with emotional disturbances and what areas are most often addressed by occupational therapists?

3) What types of occupational therapy interventions and service delivery methods are used by school-based practitioners for children with emotional disturbances?

4) How do occupational therapy practitioners view their professional preparation for providing school-based services for students with emotional disturbances?

5) What obstacles do occupational therapy practitioners encounter that limit providing services to students with emotional disturbances?

6) What is the perceived effectiveness of occupational therapy intervention by therapists who intervene for psychosocial needs of students with emotional disturbance?
Research Approach

A national mail survey, using the questionnaire "School-based occupational therapy services for students with emotional disturbances" will be used to collect data. A two-phase approach will be used. First, 1000 surveys will be mailed to a random sample of occupational therapy practitioners who are members of the AOTA School System Special Interest Section. A second mailing of the questionnaire will be sent to non-respondents. The survey will be mailed in August 2005 with an anticipated return date of September 2005.

Limitations

Survey research results can have threats to internal validity, as self-reporting may cause respondents to answer questions with "acceptable responses" rather than factual information. Potential low response rates to survey research can also be viewed as a limitation. The sample frame, being only members of the School Section Special Interest Section, limits the generalizability of the results, as practitioners who are not AOTA members or members of this specific Special Interest Section, but who practice in school-based settings are excluded from possible inclusion in the study.
CHAPTER 2

REVIEW OF LITERATURE

Occupational therapists can be an important part of the IEP team for students with emotional disturbances. Their educational preparation in child development, psychopathology and neurology can be used to guide assessment and intervention to address the needs of these children to enhance their performance in their major life occupation off school participation. Special education laws and regulations provide a foundation on which occupational therapists can use their expertise to provide services and supports to students within educational settings.

Emotional Disturbance – Definition and Potential Impacts on School Performance

Emotional Disturbance is one of 13 categories of disabilities defined in the IDEA Regulations of 1997 and the 2004 revisions for children who are of school age. According to IDEA 2004, Emotional Disturbance is defined as:

(i) The term 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

(ii) The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have emotional disturbances.

To avoid unnecessary labeling, preschoolers are not often identified as having a specific disability; rather they are typically identified as being a child or preschooler with a disability. Social-emotional difficulties are one of five areas in which a preschooler may be identified as having delays.

Students identified as having Emotional Disturbance may have significant difficulty functioning in their educational environment. Many skills may be impacted by emotional disturbances, therefore resulting in poor educational performance. Some of these factors may include the ability to express one's feelings appropriately and effectively, controlling impulses, reducing stress, reading and interpreting social cues, and understanding behavioral norms (AOTA, 2005). Children experiencing psychosocial challenges that affect their emotional and behavioral functioning may, for example, have difficulty developing and maintaining peer relationships and maintaining focus on school tasks which can negatively impact their ability engage in the occupation of being a student. These issues suggest the need for related service intervention (AOTA, 2005).

**Legislation Defining Delivery of School-Based Occupational Therapy**

Several laws have been established to ensure that children with disabilities receive special education services and/or supports necessary for them to succeed in the educational environment. Section 504 of the Rehabilitation Act of 1974 (Amended
1988), The Individuals With Disabilities Education Act (IDEA, 1990, 1997), No Child Left Behind (NCLB) Act of 2002 and most recently the reauthorization of IDEA known as the Individuals With Disabilities Education Improvement Act (IDEA 2004). IDEA defines special education evaluation and provision of services and supports within the nation’s public schools.

Section 504 applies to all schools that receive federal funding. Under Section 504, any student with a physical or mental disability that interferes with engagement in a major life activity such as learning is entitled to protection (e.g. specialized instruction, related services, accommodations). Students do not have to qualify for special education in order to qualify for related services under Section 504 (in contrast to IDEA). The emphasis of NCLB is to raise standards for all children and to help children meet these educational standards. NCLB works toward closing the gap between disadvantaged and minority students and their peers. The NCLB Act is based on four basic principles: 1) Stronger accountability for results, 2) Increased flexibility and local control, 3) Expanded options for parents, and 4) Emphasis on teaching methods that have been proven to work (U.S. Department of Education).

The IDEA (1990) originated as the 1975 Education for All Handicapped Children Act (Public Law 94-142) to support all schools (e.g. public, private, charter) in protecting the rights of, meeting the individual needs of, and improving the results for infants, children and youth with disabilities and their families. IDEA was amended in 1997 and most recently in December of 2004. IDEA asserts that all children with disabilities will receive a “free appropriate public education” in the “least restrictive environment".
Occupational therapy is a related service that is unique in its ability to provide appropriate intervention to students with a wide variety of delays. Occupational therapy students receive training to assess and provide intervention to individuals who have physical or psychological impairments that interfere with engagement in daily activities, including participation in learning/school activities.

**Frames of Reference or Models Guiding Occupational Therapy Intervention**

Numerous theories and frames of reference guide occupational therapy intervention in all areas of practice. Several frames of reference and models that may be considered when providing school-based occupational therapy intervention for students identified as having emotional disturbances include the psychodynamic frame of reference, cognitive-behavioral frame of reference, developmental frame of reference, and occupational-behavioral frame of reference. The most common theories and frames of reference used to guide school-based occupational therapy assessment and intervention for students with emotional disturbances are the person-environment-occupation frame of reference, the psychosocial frame of reference and sensory integration theory.

The person-environment-occupation frame of reference emphasizes the dynamic interaction between individuals, various aspects of their environments and the ways these interactions influence occupational performance (Law, Cooper, Strong, Stewart, Rigby & Letts, 1996). According to Law et al. (1996), a thorough understanding of person factors or qualities of an individual such as gender, age, developmental level, preferences and values, and environment factors (i.e. social and physical contexts within
which a person functions) and their interaction enable occupational therapists to approach intervention flexibly and effectively.

The psychosocial frame of reference, often used when working with younger children such as preschoolers, is derived from theories that address children’s emotional development (Stein & Cutler, 2002). Innate temperament, attachment, peer interaction, play ability to cope and environmental interaction are considered within these theories and are key issues in the development of good mental health (Olson, 1993). Development of play, peer interaction, and the ability to cope are strongly related to the adaptation of the child’s temperament in his or her environment and to the security of attachment relationships that are formed (Olson, 1993). As therapists attempt to improve adult/child activity interaction, the adult’s understanding of the child’s temperament and the adequacy of the environment must be considered. Often therapists will use play as a method to facilitate positive interactions between children and adults with the end goal being development of more adaptive coping behaviors in response to activity challenges (Olson, 1993).

Sensory integration theory and intervention originated from the work of A. Jean Ayers, due to her concerns with how brain functions affected children’s abilities to participate successfully in daily activities. She defined sensory integration as the “organization of sensation for use” (Ayres, 1979, p. 5), and focused primarily on proximal (vestibular, tactile and proprioceptive) sensory processing. Children may experience dysfunction in their abilities to engage in daily activities, for example low self-esteem and poor social skills, and perceptual skills when some aspect of sensory
integration does not function efficiently (Parham & Mailloux, 2005). According to Miller, Reisman, McIntosh, & Simon (2001), sensory modulation dysfunction is a problem in regulating and organizing the intensity, degree, and nature of responses to sensory input, which can disrupt a person’s ability to adapt to challenges in everyday life and to maintain optimal performance in any or all areas of occupation. Frequently, children with sensory integrative problems avoid simple sensory or motor challenges and exhibit tantrum behaviors or refuse to perform activities. If refusal or tantrums become long-term patterns, children may miss opportunities to engage in important social experiences (Parham & Mailloux, 2005). When school-based occupational therapists receive a referral to evaluate a child with behavioral, social or academic concerns and problems in sensory processing are suspected, it is imperative that evaluations occur to determine whether a sensory processing problem may be an underlying cause for the problems.

If it is determined that sensory integration intervention is an appropriate course of intervention, the expected outcomes of intervention would be increased the frequency or duration of adaptive responses, improved cognitive, language and academic performance, increased self-confidence and self-esteem, and enhanced occupational engagement and social participation within the school setting (Parham & Mailloux, 2005).

The principles of sensory integration theory were used in development of the Alert Program (Williams & Shellenberger, 1996). This is an intervention approach frequently used by occupational therapists with children who have self-regulation and
control difficulty related to sensory processing problems. Students with emotional disturbance often demonstrate a co-occurrence of emotional disturbances in conjunction with sensory processing problems. This cognitive and sensory integrative intervention approach helps children to learn about their environment and sensory events that may contribute to inappropriate or disruptive behaviors and also helps them learn new ways to use sensory environments and input to focus on and pay attention to occupations with improved success. Through the use of movement (vestibular), tactile, auditory and proprioceptive sensory input or reduction, the Alert Program helps children to monitor, maintain and change their level of arousal so that they can develop appropriate coping and interaction skills for school and home tasks and situations (Barnes et al., 2005).

**Types of Occupational Therapy Interventions**

AOTA’s Practice Framework outlines four types of occupational therapy interventions: therapeutic use of self, therapeutic use of occupations and activities, consultation process, and education process (AOTA, 2002).

Therapeutic use of self is a practitioner’s planned use of his or her personality, insights, perceptions and judgments as part of the therapeutic process (AOTA, 2002). The professional evaluates the effect of his or her characteristics, values and interactions with others and the extent to which this brings positive development and change (Kwiatek, McKenzie & Loads, 2005). An important aspect of therapeutic use of self is the establishment of a therapeutic relationship with an individual and to use the individuals interests to build trust and to encourage and motivate participation in therapeutic activities. Once trust is established, individuals are more willing to take
risks to obtain goals and feel safe should he/she fall short of desired outcomes. By showing interest in the individual and his/her values and enjoying his/her personality, the individual’s unique traits become the basis for designing activities that will engage the child and provide the just right challenge (Case-Smith et al, 2005).

Occupational therapists frequently use therapeutic occupations and activities to meet IEP goals. In order for occupations or activities to be considered therapeutic, activity demands, contexts and client factors need to be considered in relation to each student’s needs and goals (AOTA, 2002). Occupational therapy activity or task-oriented groups have been shown to be effective interventions for students with social and behavioral difficulties (Agrin, 1987, and Davidson & LaVessar, 1998). Activities that are motivating to students such as engaging in craft projects, planning and preparing meals and performing skits can help students develop competencies in daily living skills while also practicing adaptive responses to interpersonal challenges and improving self-esteem (Davidson, 2005). An example is the use of Social Stories, which “describe a situation, skill or concept in terms of relevant social cues, perspectives and common responses in a specifically defined style and format” (Gray, 2005) that are often used by therapists in conjunction with role playing activities and guided peer interactions to help individuals attain appropriate social skills and interpersonal skills while engaging in fun/motivating activities such as skits.

The consultation process allows occupational therapists to use their knowledge and expertise to collaborate with students, teachers, or other members of the IEP team. Using this process, the problem that is interfering with school performance is identified.
possible solutions are created, and recommendations are followed through with and altered as necessary to enhance the effectiveness of the intervention (AOTA, 2002). The occupational therapist is not directly responsible for the outcome of the intervention when engaging in the consultation process.

The final type of therapy intervention addressed by the Practice Framework, the Education Process, involves disbursement of “knowledge and information about an activity that does not result in the actual performance of the occupation/activity” (AOTA, 2002, p. 628), but that can impact the success of an occupation/activity (e.g. providing education to team members on sensory integration). For example, a therapist may provide education to teachers, parents and students on the concepts of sensory integration so that they understand the rationale for engaging in various activities, however, this foundational knowledge does result in the actual performance of the occupation/activity which is the end result or goal of therapy.

Barnes et al. (2003) found that occupational therapists who serve students with emotional disturbances most often addressed the performance areas of handwriting, computer skills, play-recreation, functional communication, student role performance, dressing and safety procedures and performance components of fine motor control- dexterity, attention span, self-control, organizational skills, managing transitions, interpersonal skills and social conduct. Additionally, Barnes et al. (2003) reported the most frequent interventions or treatment approaches used by 224 occupational therapists to treat students with emotional disturbances as being sensory integration (80.8%), school work tasks (69.2%), behavior modification (66.5%), play skills (53.1%) and social skills intervention (50%).
Methods of Service Delivery

School-based occupational therapy services can be provided in a variety of ways. Occupational therapists use their clinical judgment to determine the type of service, frequency and length of intervention sessions, based on each child's individual needs. In school-based practice, service delivery should be based on the needs of the student and the goals/objectives that have been established by all team members as part of the Individualized Education Program. However, therapist availability and cost of services can be a determining factor in the type of service delivery provided. Service delivery methods can include students receiving direct or consultative services and being seen individually or in a group setting either in the classroom or in a separate therapy area.

Direct intervention involves working with the student one on one or with peers to develop new skills or to modify an environment or activity to enable the student(s) to participate with the greatest level of independence possible. Consultative services can be provided for one student or groups of students and involve the occupational therapist, teacher and/or other professionals cooperatively engaging in a reciprocal problem-solving process (Case-Smith & Rogers, 2005). It is important for therapists to thoroughly understand the students needs and the educational system in which they are working so they can make realistic and feasible recommendations for classroom and student supports. According to Giangreco (1995, p. 58), a desirable service delivery system which provides services and supports that are "only-as-special-as-necessary" to allow for service provision that acknowledges contributions made by various
disciplines, but attempts to avoid the drawbacks of over-service. Decreased time for participation in activities with peers, inequality in distribution of scarce resources, and creating unnecessary or unhealthy dependencies are some of the concerns that need to be considered when determining how much direct service versus consultation should be provided (Giangreco, 1995). Using the "only-as-special-as-necessary" approach, the team attempts to provide the most appropriate type and amount of services for each student, rather than providing the most services possible under the "more is better" approach often used by many team members. Giangreco (1995) stresses the importance of matching the mode of service provision with the function that the service is going to be fulfilling. The function of the service (e.g. teaching new skills, training team members), should determine the need for direct or indirect/consultation service provision. It is almost impossible to provide only direct services, given that skills and knowledge of related services professionals often need to be shared with other team members in order to effectively support students progress toward achieving IEP goals/objectives. However, reporting only direct service delivery on IEP’s is a frequent occurrence by many service providers (Giagreco, 1995).

**Research on OT Services for Students with Emotional Disturbances**

As mentioned previously, limited research on occupational therapy intervention and its effectiveness in treating students with emotional disturbances has been conducted. Barnes et al. (2005) explored the usefulness of the Alert Program for treating three students with emotional and sensory processing problems and its effect on their school performance. The results of this study for determining whether a
relationship existed between the Alert Program implementation and a change in students emotional behaviors, sensory processing and self-concept skills was inconclusive due to the students’ scores showing slight improvement and the small number of students studied. However, the authors indicated that the study provided positive guidance for further clinical research on the use of the Alert Program and its effect on reduction of classroom behavioral problems.

Barnes et al. (2003) highlighted several themes which emerged as obstacles to providing occupational therapy services to school age students with emotional disturbances. The first obstacle identified was that of “Role confusion” (e.g. OT only addressing handwriting) of the occupational therapist by other team members. A limited knowledge base and understanding of what occupational therapists are supposed to do to intervene for students with emotional disturbances was also identified as a barrier to providing services. Additionally, lack of support from the team, (i.e. school psychologists) and psychologists – psychologists’ being protective of their “turf” and not understanding behaviors related to sensory issues and the importance of including occupational therapists in the process were barriers. Classroom issues and lack of follow through by teachers (e.g. getting instructors to implement calming strategies in addition to other behavioral management strategies) were also identified as obstacles to providing effective OT services. Finally, administrative factors, such as occupational therapists not having enough time to thoroughly address all of the needs of each student on their caseloads, were also barriers for occupational therapists when attempting to provide effective serves and supports to students with emotional disturbances.
These studies represent the only research focused on barriers to occupational therapy service delivery to students with emotional disturbances that could be located during a literature search. Therefore, the need to expand upon this limited research is great, as understanding obstacles can lead to promoting occupational therapy services that can improve engagement in school performance for students with emotional disturbances.

**Summary**

Enhancing the abilities of students with emotional disturbances to allow increased participation and success in educational environments is one role that occupational therapists may assume as part of an IEP team. Limited research on the educational needs of students with emotional disturbances, occupational therapy intervention provided to this population, perceived effectiveness of occupational therapy intervention by therapists who intervene for psychosocial needs of students with emotional disturbances, and obstacles occupational therapy practitioners encounter that limit providing services to students with emotional disturbance is available. Therefore these issues should be further explored to provide a more solid foundation for psychosocial occupational therapy practice in school systems.
CHAPTER 3

METHODOLOGY

Introduction

This chapter will present the methodology used to conduct the study. The chapter consists of five sections. The first section restates the research questions. The second section discusses the population of the study and the sampling design. The third section discusses the study instrument development followed by the procedure used for data collection. Finally, section five details methods used to analyze the data.

Research Questions

In order to move forward in obtaining information that can lead to more evidence-based occupational therapy practice in school settings when working with students having emotional disturbances, the following research questions were proposed.

The questions that this survey research was attempting to answer include:

1) What is the percentage of students on school-based occupational therapists caseloads who have been identified as having emotional disturbances?

2) What performance skills and client factors most often affect school functioning in students with emotional disturbances and what areas are most often addressed by occupational therapists?

3) What types of occupational therapy interventions and service delivery methods are used by school-based practitioners for children with emotional disturbances?
4) How do occupational therapy practitioners view their professional preparation for providing school-based services for students with emotional disturbances?

5) What obstacles do occupational therapy practitioners encounter that limit providing services to students with emotional disturbances?

6) What is the perceived effectiveness of occupational therapy intervention by therapists who intervene for psychosocial needs of students with emotional disturbance?

**Sample**

The sample of 1,000 school-based occupational therapists was obtained from a computer-generated random selection of therapists from the American Occupational Therapy Association’s (AOTA) School System Special Interest Section. The sample was geographically stratified and represented currently practicing school-based occupational therapists in U.S. public and private school settings. One limitation of the sample is that not all school-based occupational therapists belong to AOTA and therefore not all practicing therapists had equal opportunity of being selected to receive the survey.

**Instrumentation Development**

A questionnaire entitled “School-Based Occupational Therapy Practice for Students with Emotional Disturbances” (Appendix C) was developed, basing the content and format on a similar survey used by Barnes et al. (2003). The 16-item instrument contained questions regarding the occupational therapist’s demographics, educational outcomes addressed by occupational therapy on the IEP’s of students with social emotional disturbances, the frequency in which occupational therapists address the goal areas through intervention, types of intervention strategies utilized by
therapists, service delivery methods, educational preparedness for providing intervention to students having emotional disturbances, team members who typically provide intervention to address psychosocial needs of students with emotional disturbances, and obstacles that exist which interfere with occupational therapists providing services to students with emotional disturbances. Most items on the questionnaire utilized a Likert scale rating system or a forced choice format. Some questionnaire items required written responses.

The questionnaire was piloted by 6 occupational therapists in Ohio. Feedback was obtained from the therapists regarding the content and clarity of the items on the questionnaire. Each therapist marked the clarity and content on a yes/no scale. The response for content yielded a 100% positive rating. The clarity of items yielded an 83% positive rating. Written comments were taken into consideration for minor modifications to clarify questionnaire items.

**Procedure**

A national survey of 1,000 occupational therapists was conducted using the questionnaire, “School-Based Occupational Therapy Practice for Students with Emotional Disturbances”. Two phases were used. First, a data collection phase (mailing of cover letter – Appendix A and questionnaires) was completed. The follow-up phase, a second mailing of reminder letters (Appendix B) and questionnaires to half of the non-respondents was sent one month after the initial mailing. The first mailing was sent at the beginning of August, 2005 and all questionnaires included in the study were received by early October, 2005.
Data Analysis

Data pertaining to research questions 1 through 4 and 6 was analyzed using means, frequency and percentages. Tables were utilized to provide visual depictions and organization of the data. Descriptive analysis was completed for research questions 3 and 5. All qualitative responses were recorded, tallied and reviewed to identify common themes and concepts.
CHAPTER 4

RESULTS

Introduction

The following chapter on results is divided into sections. The first section of this chapter provides demographic information about the respondents to the survey. The first section begins with a discussion of survey response rate, practice setting, each occupational therapists involvement in providing services to students with emotional disturbance and level of education of each respondent. The second section of the chapter addresses the results of the research questions.

Sample / Demographic Information

A total of 555 surveys were returned from both mailings, evenly representing the population of school-based occupational therapists practicing in all 50 states. The number of returned surveys represented 55.5% of the population that was sampled. There was no statistical difference between the 1st and 2nd mailing respondents. Of those surveys returned, 508 (91.5%) were school-based occupational therapists. A total of 343 therapists reported at least some percentage of their caseload included students with ED. Additionally, 165 therapists indicated that they did not have any students with ED on their caseload at this time. Forty seven individuals or 7.8% of respondents indicated that they did not practice in the area of school-based occupational therapy.
Responses for practice setting indicated that 473 of the school-based occupational therapists (85.2%) practice in public school settings. Eighteen individuals (3.2%) practice in private school settings. Additionally, there were 21 therapists (3.8%) who reported working in both public and private school settings. Therapists reporting that they work in a preschool setting (ages 3-5 years) made up 20.2% of responses, elementary school setting (Grades K-5) 55.9% of responses, middle school (Grades 6-8) 31.9% of responses, and high school (Grades 9-Graduation) 15% of responses. Some therapists provided services to students in only one age/grade group, while others provided services to multiple ages/grades or all ages/grades.

The respondents reported having one to 51 years of practice in the field of occupational therapy. The mean for years of practice was 15.7 years. The percentages of those reporting their level of education were as follows: 49.9% had at least a Bachelor’s degree, and 50.1% had at least a Master’s degree.

**Research Questions**

**Question #1:** What is the percentage of students on school-based occupational therapists caseloads who have been identified as having emotional disturbances?

The ranges reported by school-based occupational therapists for the percentage of students with ED on their caseloads was 0%-100% (Table 1). Those occupational therapists who reported having no or less than 5% of children with ED on their caseloads represented 64.8% of the reporting sample. Of therapists who reported having students with emotional disturbance on caseload, 306 (60.2%) of these therapists had a caseload of twenty five percent or fewer students with emotional disturbance.

The mean percentage of students with emotional disturbance on school-based occupational therapists caseloads was 8.2 (S.D. = 13.9).
Table 1: Frequencies and percentages of respondents with emotionally disturbed students on caseload

<table>
<thead>
<tr>
<th>Ranges Reported (Percent of caseload)</th>
<th>Frequency of therapists</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>165</td>
<td>32.4</td>
</tr>
<tr>
<td>1-25</td>
<td>306</td>
<td>60.2</td>
</tr>
<tr>
<td>26-50</td>
<td>28</td>
<td>5.6</td>
</tr>
<tr>
<td>51-75</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>76-100</td>
<td>4</td>
<td>.8</td>
</tr>
</tbody>
</table>

Question #2: What performance skills and client factors most often affect school functioning in students with emotional disturbances and what areas are most often addressed by occupational therapists?

Respondents were asked to select the frequency that each item was addressed by the team as a goal or objective on the IEP and the frequency that the item was addressed by OT (Table 2). A Likert scale using the following frequency options was used: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often and 5 = Always. The respondents rated ten of the Performance Skills / Client Factors as sometimes and often (3.6 or higher) when asked if they were addressed as an IEP goal/objective by any team member. These Performance Skills / Client Factors included in order of highest to lowest: maintaining behavioral control in small/large groups, maintaining attention to task, responding appropriately to social interaction, working/playing in groups without disrupting others, expressing anger using non-aggressive means, maintaining social / physical boundaries, observing rules regarding turn taking, works productively on work tasks – not distracted, working cooperatively with others on goal directed activities, and appropriately identifying and sharing feelings / emotions with others.
When asked if occupational therapy was a service to address the 18 goal areas, two were addressed often: student maintaining attention to task and motor skills. The remaining items had a mean between 2.8 and 3.1 with the exception of the items of sharing material (m = 2.6), appropriately identifying and sharing feelings/emotions with others (m = 2.5) and using good manners (m = 2.5) and modulating voice tone/volume appropriately (m = 2.4). The greatest disparity between an item being an IEP goal and OT addressing the goal was with students appropriately identifying and sharing feelings/emotions with others (3.6 compared to 2.5). Figure one compares the frequency that the skill is an IEP goal and OT goal.

![Figure 1: Comparison of means for performance skills / client factors](image)
<table>
<thead>
<tr>
<th>PERFORMANCE SKILLS / CLIENT FACTORS</th>
<th>Item Addressed as an IEP Goal/Objective Mean (1-5) SD</th>
<th>Item a Goal / Objective Addressed by OT Mean (1-5) SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) MAINTAINS BEHAVIORAL CONTROL IN SMALL/LARGE GROUPS</td>
<td>4.0 .89</td>
<td>3.1 1.18</td>
</tr>
<tr>
<td>2) MAINTAINS ATTENTION TO TASK</td>
<td>3.9 .79</td>
<td>3.6 .99</td>
</tr>
<tr>
<td>3) RESPOND APPROPRIATELY TO SOCIAL INTERACTION</td>
<td>3.9 .94</td>
<td>3.0 1.23</td>
</tr>
<tr>
<td>4) WORKS/PLAYS IN GROUPS WITHOUT DISRUPTING OTHERS</td>
<td>3.9 .93</td>
<td>3.0 1.21</td>
</tr>
<tr>
<td>5) EXPRESSES ANGER USING NON-AGGRESSIVE MEANS</td>
<td>3.8 1.04</td>
<td>2.8 1.24</td>
</tr>
<tr>
<td>6) MAINTAIN SOCIAL/PHYSICAL BOUNDARIES</td>
<td>3.7 1.00</td>
<td>3.0 1.15</td>
</tr>
<tr>
<td>7) OBSERVES RULES REGARDING TURN TAKING</td>
<td>3.6 1.01</td>
<td>2.9 1.23</td>
</tr>
<tr>
<td>8) WORKS PRODUCTIVELY ON WORK – NOT DISTRACTED</td>
<td>3.6 1.01</td>
<td>3.1 1.10</td>
</tr>
<tr>
<td>9) WORKS COOPERATIVELY WITH OTHERS ON GOAL DIRECTED ACTIVITIES</td>
<td>3.6 1.03</td>
<td>2.8 1.21</td>
</tr>
<tr>
<td>10) APPROPRIATELY IDENTIFIES AND SHARES FEELINGS/EMOTIONS WITH OTHERS</td>
<td>3.6 1.07</td>
<td>2.5 1.13</td>
</tr>
<tr>
<td>11) KEEPS WORK AREA ORGANIZED</td>
<td>3.5 .91</td>
<td>3.3 1.05</td>
</tr>
<tr>
<td>12) FOLLOWS RULES REGARDING MOVEMENT AROUND THE CLASSROOM</td>
<td>3.5 1.03</td>
<td>2.9 1.16</td>
</tr>
<tr>
<td>13) DISPLAYS APPROPRIATE RESTRAINT REGARDING SELF-STIMULATION</td>
<td>3.4 1.06</td>
<td>3.1 1.17</td>
</tr>
<tr>
<td>14) SHARES MATERIALS</td>
<td>3.4 1.10</td>
<td>2.6 1.20</td>
</tr>
<tr>
<td>15) MOTOR SKILLS</td>
<td>3.2 1.06</td>
<td>3.6 1.05</td>
</tr>
<tr>
<td>16) MODULATES VOICE TONE/VOLUME APPROPRIATELY</td>
<td>3.1 1.15</td>
<td>2.4 1.18</td>
</tr>
<tr>
<td>17) USES GOOD MANNERS</td>
<td>3.1 1.18</td>
<td>2.5 1.24</td>
</tr>
<tr>
<td>18) ACTIVITIES OF DAILY LIVING</td>
<td>2.8 1.07</td>
<td>3.0 1.27</td>
</tr>
</tbody>
</table>

Table 2: Means and standard deviations of performance skills / client factors addressed as IEP objectives and addressed by OT
Question #3: What types of occupational therapy interventions and service delivery methods are used by school-based occupational therapy practitioners for children with emotional disturbances?

When asked to rate the types of occupational therapy intervention strategies used in intervening for students with ED, using the following scale: 1 = Never, 2 = Seldom, 3 = Occasionally, 4 = Frequently, and 5 = Always. Results revealed that 226 therapists (67.6%) use therapeutic use of self either frequently or always (Table 3). Therapists reporting use of occupations and activities frequently made up 43.3% (n = 145) of those surveyed, with 37% (n = 124) reporting use always. Consultation Process and Educational Process were frequently or always used by 73.6% and 62.9% of the sample.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>1 (Never) f(%)</th>
<th>2 (Seldom) f(%)</th>
<th>3 (Sometimes) f(%)</th>
<th>4 (Frequently) f(%)</th>
<th>5 (Always) f(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THERAPEUTIC USE OF SELF OCCUPATIONS &amp; ACTIVITIES</td>
<td>7(2.1)</td>
<td>20(6.0)</td>
<td>81(24.3)</td>
<td>104(31.1)</td>
<td>122(36.5)</td>
</tr>
<tr>
<td>CONSULTATION PROCESS</td>
<td>1(0.53)</td>
<td>9(2.7)</td>
<td>56(16.7)</td>
<td>145(43.3)</td>
<td>124(37.0)</td>
</tr>
<tr>
<td>EDUCATIONAL PROCESS</td>
<td>3(0.9)</td>
<td>12(3.5)</td>
<td>74(22.0)</td>
<td>150(44.5)</td>
<td>98(29.1)</td>
</tr>
<tr>
<td></td>
<td>5(1.6)</td>
<td>25(7.8)</td>
<td>89(27.7)</td>
<td>134(41.7)</td>
<td>68(21.2)</td>
</tr>
</tbody>
</table>

Table 3: Frequencies and percentages of therapeutic interventions used by respondents for students with emotional disturbance

School-based occupational therapists who provide intervention for students with emotional disturbance were asked to give feedback on specific intervention strategies used to treat students with emotional disturbance (Table 4). The information provided was qualitative as opposed to forced choice response answers as in the previous section. Sensory strategies, including use of sensory integration techniques, sensory modulation and regulation programs such as the Alert Program – How Does Your Engine Run?, and
sensory diets, were most often listed as intervention techniques used within this most frequently reported intervention category. Behavior Modification / Management was the second most often reported treatment intervention listed by occupational therapists for treating students with ED. Specific strategies falling under this category included use of reward (i.e. token, sticker) systems, self-rating charts, choice-making and Discrete Trial Training / Applied Behavior Analysis. Social skills training was also in the top three specific interventions reported by occupational therapists when working with students with ED. Examples of methods used for social skill training included group activities to practice social skills/manners, use of social stories/self-monitoring strategies and role playing.

<table>
<thead>
<tr>
<th>Specific Intervention Strategy</th>
<th>Frequency Therapists* Reported Using</th>
<th>Percentage of Therapists* Who Reported Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory Strategies</td>
<td>292</td>
<td>85.1</td>
</tr>
<tr>
<td>Behavior Modification / Management</td>
<td>208</td>
<td>60.6</td>
</tr>
<tr>
<td>Social Skills Training</td>
<td>136</td>
<td>39.7</td>
</tr>
<tr>
<td>Motor or Perceptual Skills Development Activities</td>
<td>60</td>
<td>17.5</td>
</tr>
<tr>
<td>Emotions / Feeling Identification</td>
<td>25</td>
<td>7.3</td>
</tr>
<tr>
<td>Task or Environmental Adaptations / Modifications</td>
<td>25</td>
<td>7.3</td>
</tr>
<tr>
<td>Visual Supports / Schedules</td>
<td>23</td>
<td>6.7</td>
</tr>
<tr>
<td>ADL Training / Life Skill Development</td>
<td>19</td>
<td>5.5</td>
</tr>
<tr>
<td>Training in Stress/Anger Management and/or Relaxation</td>
<td>18</td>
<td>5.2</td>
</tr>
<tr>
<td>Pre-vocational Skills Training</td>
<td>8</td>
<td>2.3</td>
</tr>
<tr>
<td>Role Modeling</td>
<td>7</td>
<td>2.0</td>
</tr>
<tr>
<td>Cognitive Skills Development</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Therapeutic Listening</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Journaling</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Community Integration</td>
<td>2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

* Based on number of therapists with children with emotional disorders on their caseloads

Table 4: Frequency of respondents’ use of specific intervention strategies to treat students with emotional disturbance
Additionally, school-based occupational therapists responding to the survey were asked which professionals were IEP team member(s) for students with emotional disturbances. The number one team member recognized as addressing psychosocial needs of students with ED was the regular education and/or special teacher (Table 5). Following the teacher, the school psychologist was reported to be most often involved. Many occupational therapists commented that although psychology was involved, it is often only for testing purposes, not for intervention. Occupational therapy was identified as the third service most often involved with students with ED. School counselors fell close behind occupational therapy (f = 349). Other team members less often involved with addressing the psychosocial needs of students with ED as reported by school-based occupational therapists included social workers/case managers (f = 81), speech therapists (f = 66), behavior specialists/consultants (f = 60), parents/guardians (f = 29), administrators/special education directors (f = 26), paraprofessionals - classroom assistants, one on one aides (f = 22), outside mental health agencies/services (f = 20), physical therapists (f = 14), physician and/or school nurse (f = 12), and music/art/recreational therapist/adapted physical education teacher (f = 6).
<table>
<thead>
<tr>
<th>Team Member</th>
<th>OT's With Active ED Student Caseload</th>
<th>OT's Without ED Student Caseload</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher / Spec. Ed. Teacher</td>
<td>308</td>
<td>120</td>
<td>428</td>
</tr>
<tr>
<td>Psychologist</td>
<td>269</td>
<td>138</td>
<td>405</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>283</td>
<td>79</td>
<td>362</td>
</tr>
<tr>
<td>School Counselor</td>
<td>241</td>
<td>108</td>
<td>349</td>
</tr>
<tr>
<td>Social Worker / Case Manager</td>
<td>51</td>
<td>30</td>
<td>81</td>
</tr>
<tr>
<td>Speech Therapist</td>
<td>59</td>
<td>7</td>
<td>66</td>
</tr>
<tr>
<td>Behavior Specialist / Consultant</td>
<td>43</td>
<td>17</td>
<td>60</td>
</tr>
<tr>
<td>Parent / Guardian</td>
<td>26</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>Administrator / Spec. Ed. Director</td>
<td>22</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>Paraprofessionals</td>
<td>21</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Outside Mental Health Agencies</td>
<td>14</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>10</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Physician / School Nurse</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Music / Art / Rec. Therapist / APE</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 5: Frequency of professionals who address psychosocial needs of students with emotional disturbance
When occupational therapists are involved in providing intervention to students with ED, they rated the frequency that specific service delivery methods were used (See Table 7). All methods of service delivery had a mean of less than 3.5 with the exception of using a Combination of Consultation and Direct service delivery which was used often (m = 3.7, SD =1.04).

<table>
<thead>
<tr>
<th>Method</th>
<th>Mean (SD) (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination of Consultation &amp; Direct</td>
<td>3.7 (1.04)</td>
</tr>
<tr>
<td>Combination of Individual and Group</td>
<td>3.4 (1.05)</td>
</tr>
<tr>
<td>Seen in Classroom</td>
<td>3.4 (0.88)</td>
</tr>
<tr>
<td>Therapy Room / Pull Out</td>
<td>3.3 (0.92)</td>
</tr>
<tr>
<td>Individual Only</td>
<td>3.2 (0.99)</td>
</tr>
<tr>
<td>Consultation Only</td>
<td>2.8 (0.97)</td>
</tr>
<tr>
<td>Direct Service Only</td>
<td>2.7 (1.19)</td>
</tr>
<tr>
<td>Group Only</td>
<td>2.5 (0.98)</td>
</tr>
</tbody>
</table>

Table 6: Means and standard deviations for method of OT service delivery reported by respondents

**Question #4: How do occupational therapy practitioners view their professional preparation for providing school-based services for students with emotional disturbances?**

A total of 502 school-based occupational therapists provided input as to how they felt their university based programming prepared them for providing school-based services to students with emotional disturbances (Table 7). A scale of 1 = Not At All, 2 = Minimally, 3 = Adequately, 4 = Well, and 5 = Exceptionally Well was used by respondents to rate their preparation level. Of those therapists responding, a total of 334 (66.5%) responded that their university preparation had prepared them **minimally or not at all** for providing school-based services for students with emotional disturbances.
Just under 26% (f = 130) of therapists responding reported that their university education was **adequate** for preparing them to provide services to students with emotional disturbance. Finally, only 38 (7.6%) individuals rated their university education either as preparing them **well or exceptionally well** for providing intervention for students with emotional disturbance. The mean (2.3) indicated that university preparation was minimal.

<table>
<thead>
<tr>
<th>Rating for university preparation</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Not At All</td>
<td>68</td>
<td>13.5</td>
</tr>
<tr>
<td>(2) Minimally</td>
<td>266</td>
<td>53.0</td>
</tr>
<tr>
<td>(3) Adequately</td>
<td>130</td>
<td>25.9</td>
</tr>
<tr>
<td>(4) Well</td>
<td>33</td>
<td>6.6</td>
</tr>
<tr>
<td>(5) Exceptionally Well</td>
<td>5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 7: Frequencies and percentages of respondents rating of university preparation

Additionally, 502 therapists also responded as to the frequency with which they attend continuing education courses related to providing occupational therapy services to students with emotional disturbances (Table 8). The mean attendance for continuing education was just under the every 3-5 year mark (m = 2.99, SD = 1.51). A total of 311 therapists (61.9%) reported attending continuing education conferences related to treatment of students with emotional disturbance at least every five years. Only 50 therapists reported attending continuing education pertaining to this topic greater than every five years. Just over 28% of school-based therapists (f = 141) reported that they have never attended a continuing education conference related to treating students with emotional disturbance.
<table>
<thead>
<tr>
<th>Attendance Frequency</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>99</td>
<td>19.7</td>
</tr>
<tr>
<td>Every 2-3 Years</td>
<td>138</td>
<td>27.5</td>
</tr>
<tr>
<td>Every 3-5 Years</td>
<td>74</td>
<td>14.7</td>
</tr>
<tr>
<td>Greater Than 5 Years</td>
<td>50</td>
<td>10.0</td>
</tr>
<tr>
<td>Never</td>
<td>141</td>
<td>28.1</td>
</tr>
</tbody>
</table>

Table 8: Frequencies and percentages of respondents rates of attendance of continuing education

**Question #5: What obstacles do occupational therapy practitioners encounter that limit providing services to students with emotional disturbances?**

Both school-based occupational therapists who currently have students with ED on their caseloads and therapists who work in the schools but do not have any students with ED on their caseloads were asked to provide input on obstacles or barriers that they encounter that limit or interfere with occupational therapy service provision to these students within the school setting. Several themes appeared (Table 9) when reviewing the data obtained, with the following ten themes being at the top of the list:

1) Team members not understanding the role of OT, 2) Time constraints for service delivery due to high caseload numbers or therapists serving several different schools, 3) Lack of follow through with OT recommendations, 4) Occupational therapists not receiving referrals to provide services to students with ED, 5) Limited family follow through with recommendations for home, 6) Lack of occupational therapy staff training for providing intervention to meet the needs of students with ED, 7) Limited treatment space and/or equipment for providing occupational therapy services, 8) Professional territorialism by team members on the IEP, 9) Lack of identification of students with ED, and 10) Getting disruptive behaviors under control before being able to address other issues or student needs.
<table>
<thead>
<tr>
<th>Obstacle</th>
<th>OT's With Active ED Student Caseload</th>
<th>OT's Without ED Students on Caseload</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Members Not Understanding OT Role</td>
<td>46</td>
<td>16</td>
<td>62</td>
</tr>
<tr>
<td>Time</td>
<td>48</td>
<td>11</td>
<td>59</td>
</tr>
<tr>
<td>Follow Through With OT Recommendations</td>
<td>39</td>
<td>2</td>
<td>41</td>
</tr>
<tr>
<td>OT's Not Getting Referrals</td>
<td>27</td>
<td>13</td>
<td>40</td>
</tr>
<tr>
<td>Decreased Family Follow Through</td>
<td>31</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>Lack of OT Staff Training for Population</td>
<td>21</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td>OT Treatment Space and/or Equipment</td>
<td>27</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Professional Territorialism</td>
<td>20</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Identification of Students with ED</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Controlling Disruptive Behaviors</td>
<td>16</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>None</td>
<td>13</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Differentiating Sensory Needs from Behavior</td>
<td>13</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Establishing Rapport</td>
<td>11</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Funding for Services</td>
<td>13</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Interpretation of &quot;Educational Relevance&quot;</td>
<td>12</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Frequent Absenteeism</td>
<td>10</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Inconsistent Medication Routines / Changes</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Scheduling Conflicts</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>ED Students Sent Out of Building/District</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Lack of OT Training / Continuing Education</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Lack of Evidence for OT Effectiveness</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Students Viewed as &quot;Behavior Problems&quot;</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Stigma</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Lack of Adequate Assessment Tools</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Student or Staff Safety</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Comfort of Teachers with OT in Classrooms</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 9: Number of obstacles encountered that limit OT service provision
The most predominant theme that arose from therapist feedback was that IEP team members and/or administration not understanding or supporting the psycho-social role that occupational therapists can lead to provide services and supports to students with emotional disturbance. One therapist commented that she experiences a “minimalist delivery of service provision attitude by many team members.” This echoes the response of many therapists stating “it is difficult to educate and make team members understand that we are not just handwriting therapists.” Some therapists took responsibility for the lack of understanding commenting “school systems in my district have not been educated regarding the positive outcomes of having occupational therapy involved (with students with ED) other than for sensory or fine motor needs.” Another therapist commented that there seems to be a “reluctance of school systems and occupational therapists to broaden their scope of practice.” Numerous occupational therapists reported feeling frustrated because they do not receive referrals for students with ED. The comment was made by many therapists that “generally OT is not considered as a service unless there are fine motor, sensory or other functional issues that affect the student’s progress in the educational curriculum”. Psychosocial needs are often overlooked. Many therapists also commented that OT can not be a stand alone service, which may be a reason for limited referrals for students with ED.

The second highest reported obstacle to providing effective occupational therapy service provision to this population was time constraints. Several therapists reported that they felt pressured for time to effectively meet with team members to collaborate, communicate and provide training on intervention strategies to help students with ED. Also, multiple therapists commented that large caseload numbers make it difficult to
provide services to all students based on their needs as stated on IEP’s. Lack of occupational therapist staffing and therapists serving multiple schools within a district also contributed to time limitations that negatively impact the quality of occupational therapy services that can be provided to students with emotional disturbance.

“Providing appropriate services to meet a child’s needs doesn’t always mean providing the best services” was reported by one therapist as being her school districts philosophy on providing a free appropriate public education to students with special needs, which includes those with ED.

Many occupational therapists reported that lack of follow through with occupational therapy recommendations by other school staff hindered the progress of students with ED. Several potential reasons for decreased follow through, reported by therapists included high need levels of students with special needs making it difficult to meet everyone’s needs all of the time, decreased valuation by some teachers, paraprofessionals and other school staff regarding strategies and suggestions provided by occupational therapists, students not always using sensory strategies appropriately and therefore teachers refusing to use the strategies for any students and students transitioning between classrooms making consistency with programming between all team members difficult.

Decreased family follow through with home program suggestions/recommendations also makes providing effective service to students with emotional disturbance difficult according to several therapists. Families having their own mental health issues or unsupportive home environments were some factors listed that hindered family follow through with occupational therapy and other IEP team member
suggestions. One therapist reported that “despite continuous contact, education to
families and other supports, many families find it difficult to believe in or understand
the benefits of consistency of tools used by occupational therapists and school-based
intervention” to make positive changes in the lives of their family member with ED.

Given the earlier mentioned finding that most school based occupational
therapists felt minimally prepared or not at all prepared to address the needs of students
with ED based on their university training, it then follows that another barrier to
effective service provision is that many therapists reported that they lack training for
intervening with this population. There were some therapists who reported feeling
“incompetent” or “uncomfortable” to provide services to students with ED, while others
indicated that need for further education/training was an obstacle to providing services
to students with ED.

Limited treatment space and/or equipment was also a common theme among
therapists as a barrier to providing services to students with ED. Some therapists stated
that it was difficult to provide one to one services that some of these students need when
their only place to see the student was in the classroom. Also, lack of appropriate
sensory equipment or tools to meet students needs was frequently expressed by many
therapists.

Many therapists reported encountering “professional territorialism” by other
team members who believe that they are the only ones who should be providing
services to students with ED. There is “need for role release by specialists in an
integrated school setting” and “increased support for an interdisciplinary approach” to
helping children with ED overcome their struggles within the school environment.
While many therapists reported having this problem, several therapists commented on the good working relationships among team members who were all working together to meet the individual needs of each student with ED.

Appropriate identification or lack of identification of students with ED was reported by several therapists as a barrier to effective service provision. This was reported more frequently by therapists working with younger students, who reported that they felt a “reluctance” by those responsible for making a diagnosis to “label” children too early on, but in some cases appropriate services could not be provided without the students being identified as having ED.

Finally, the last of the top ten obstacles encountered by OT’s that limit effective service provision was reported to be controlling disruptive behaviors of students with ED before other goals could be focused on. “Sometimes it takes most of a treatment session to get a student calm and in the just right place for learning and to keep them there” was a comment made by one therapist. Another therapist commented that “negative behaviors can impact social interaction with other students and the student’s learning, and therefore must be addressed first before focusing on IEP goals.”

**Question #6: What is the perceived effectiveness of occupational therapy intervention by therapists who intervene for psychosocial needs of students with emotional disturbance?**

Of the 335 therapists who responded to this question, 129(38.5%) reported that 50-75% of students receiving occupational therapy services as a related service contributing to the IEP have shown positive outcomes due to intervention (Table 10). Only 4 respondents (1.2%) reported no positive outcomes based on OT intervention.
<table>
<thead>
<tr>
<th>PERCEIVED POSITIVE OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Caseload Percentage</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1-25</td>
</tr>
<tr>
<td>26-50</td>
</tr>
<tr>
<td>51-75</td>
</tr>
<tr>
<td>76-100</td>
</tr>
</tbody>
</table>

Table 10: Frequencies and percentages of respondents with percentage of caseload achieving positive outcomes

The responses from this research study yielded some expected, disturbing and interesting results which warrant further discussion and which provide implications for occupational therapy practice.
CHAPTER 5

DISCUSSION OF RESULTS

Introduction

The purpose of the chapter is to provide a summary of the findings, conclusions, implications, limitations and recommendations pertaining to the study. The first section provides a summary of the findings, which is an overview of the study results in Chapter Four. The second section discusses practice implications and conclusions based on the research findings. The third section restates the limitations of the study which affect generalizability of the findings. Finally, the fourth section presents recommendations generated from the results of this survey study on school-based occupational therapy for students with emotional disturbance and conclusions.

Summary of Findings

The first research question asked what percentage of school-based occupational therapists caseloads are students who have been identified as having emotional disturbances. Just over 32% of occupational therapists practicing in schools do not provide services to children with social emotional needs. Of those therapists who do have students with social emotional needs on their caseload, the average caseload percentage in comparison to other disability categories is small (m = 8.2%). Barnes et
al. (2003) also found that occupational therapists do not often provide services to children whose primary diagnosis is social emotional impairment. Traditionally, occupational therapists in school settings have provided services to children primarily with sensory or motor impairments. However, the scope of practice for OT includes children with mental health problems (AOTA, 2005; AOTA, 2002). Several authors (e.g., Case-Smith & Rogers, 2005; Davidson & LaVesser, 1998) have discussed the value of OT services to this population. The results of this study demonstrate that many occupational therapists embrace the opportunity to provide services to students with emotional disturbance. Over 60% of school-based occupational therapists have students with emotional disturbance on their caseload currently. Similar to the Barnes et al. (2003) study, in which the mean percentage of students with emotional disturbance on OT caseloads was 10.9%, the results of this study had a mean of 8.2% of therapist caseloads comprised of students with ED. The majority of therapists responding to this survey (92.6%) reported that their caseloads were comprised of 25% or fewer students identified as having emotional disturbance. Many therapists commented that their caseloads were “comprised mainly of students with motor or sensory deficits and students with emotional disturbance were only referred for OT services if they had deficits in another area.” The demand for services to students with emotional disturbance is increasing as these students currently comprise the 4th largest disability category (U.S. Department of Education, 2004), surpassing the number with sensory motor deficits.

The second research question examined the goals and areas of intervention focus for OT’s and for IEP teams. The most frequent goal areas for OT to address on the IEP
were maintaining attention to task and motor skill acquisition. Other studies have described these areas as the primary focus of OT school-based practice. Given occupational therapists training in psychopathology, child development and neurology, it is surprising that goal areas pertaining to meeting the social emotional needs of students, such as maintaining behavioral control in groups, responding appropriately to social interaction, expressing anger using non-aggressive means, maintaining social/physical boundaries, appropriately identifying and sharing feelings/emotions with others and sharing materials were not highly ranked by respondents as being a focus of occupational therapy intervention.

All educational outcome items selected for inclusion in the survey, with the exception of students modulating voice tone/volume appropriately, had a mean rating in the 3 (sometimes) or 4 (often) range for being addressed as an IEP goal or objective. These are areas in which students with ED frequently demonstrate impairments that impact their ability to successfully engage in activities within the educational environment. Occupational therapy involvement for students with ED was most predominant when goals/objectives focused on maintaining attention to task and improving motor skills were included on the IEP. They sometimes addressed goals directly related to interpersonal skills or social interaction. Critical issues for these children, such as appropriately identifying and sharing feelings/emotions with others, were rarely addressed by occupational therapists, which was surprising considering this skill was often included on IEP’s (m = 3.6). This is similar to Barnes et al. (2003) finding that interpersonal skills and social conduct were addressed by OT’s between 55-60% of the time.
The third research question asked what intervention approaches and specific strategies were used by OT to treat students with emotional disturbance. The forced choice results for occupational therapy interventions and service delivery methods were not surprising. Percentages of 67.6% for frequently or always using therapeutic use of self, 80.3% for frequently or always using occupations and activities, 73.1% for frequently or always using consultation process and 62.9% for frequently or always using educational process, demonstrate that when therapists are providing intervention for students with emotional disturbance, they use appropriate and recommended intervention strategies (AOTA, 2002; Davidson, 2005). Combination of consultation and direct services was most often used as a method of service delivery. Many therapists commented that “direct service was important to help students learn specific skills (i.e. social skills) in a controlled environment before expecting the student to use the skill in a classroom environment”, but felt that the consultation with teachers and other service providers was imperative to successfully meeting student goals/objectives. The individuality of service delivery methods based on student needs and structure of the working/school environment is apparent given that the majority of therapists answered sometimes or often to use of different service delivery models.

The top three qualitative findings for most frequently reported intervention strategies used to treat students with ED were 1) sensory strategies, 2) behavior modification/management techniques, and 3) social skills training. These are strategies developed to improve children’s behaviors and interpersonal skills.

Given that students with emotional disturbance often have difficulty managing behavior and relating to others/demonstrating appropriate social skills, listing of these
intervention strategies appear to be appropriate; however, it is not clear that children with ED has underlying sensory processing problems or that sensory strategies are needed to remediate sensory processing problems. Barnes et al. (2003) were also perplexed to find that occupational therapists emphasized use of sensory strategies to intervene with students with ED as sensory modulation and integration deficits are generally not found to be problems in students with ED and minimal research on use of the intervention strategies with this population has taken place. Another unusual finding was the discrepancy between the results of forced choice answers and answers fill in questions pertaining to intervention strategies used for students with emotional disturbance. Because therapeutic use of self being was reported to be a frequently used intervention approach, one would then assume that qualitative answers would have reflected how therapeutic use of self was applied to these children.

The fourth research question asked about the adequacy of training for occupational therapists providing school-based occupational therapy services to students with emotional disturbance. Clearly, most occupational therapists (66.5%) entering school-based practice felt less than adequately prepared for providing services to students with emotional disturbance. This finding is similar to results of a study conducted by Burtner, McMain, & Crowe (2002) in which 54% of occupational therapists felt that they were not adequately prepared for school-based practice. Lack of preparation and training is an important factor in why OT’s do not provide services to students with emotional disturbance. Several respondents expressed that lack of training both from university and continuing education experiences was a barrier to providing services to these children.
The fifth research question asked the respondents to identify barriers to working with children with emotional disturbance. The respondents identified 26 barrier themes, with the top six substantial themes being: 1) team members not understanding the role of OT, 2) time constraints, 3) lack of follow through with OT recommendations by other team members, 4) OT's not getting referrals to intervene with students with emotional disturbance, 5) decreased family follow through with team suggestions and 6) lack of OT staff training for providing effective intervention for this population. The results of this question were further combined into two themes: 1) barriers related to limited referrals of children with emotional disturbance for occupational therapy evaluation/intervention, and 2) barriers related to limitations in the effectiveness of intervention.

Of the top ten barriers to occupational therapy service delivery, team members not understanding the role of OT, occupational therapists not receiving referrals to provide services to students with emotional disturbance, professional territorialism by team IEP members, and lack of identification of students with ED all pertain to lack of referrals for occupational therapy services for children with emotional disturbance. An interdisciplinary approach to service provision, where multiple disciplines are responsible for providing intervention and working together to address common goals is the ideal approach for intervening with all students receiving special education services. Often, however, when teams make decisions regarding related services, they often used specific test score cut offs and stereotypic provider "roles" (i.e. only fine motor deficits warrant OT intervention). Unfortunately, these approaches often lead to fragmented services that are not unified by common IEP goals and this practice can greatly interfere
with appropriate related services provision (Giangreco, et al., 1991). This holds true as a barrier for occupational therapists providing services to students with ED, as the number one barrier reported by occupational therapists was team members not understanding the role of OT for providing intervention to meet the psychosocial and other possible needs of students with ED. Additionally, the fourth most common theme was occupational therapists not receiving referrals to provide services to students with ED, which is probably related to team members not understanding the contributions that occupational therapists have to offer. School-based OT’s reported that the top five professionals to provide intervention for students with ED were 1) teachers/special education teachers, 2) psychologists, 3) occupational therapists, 4) school counselors and 5) social workers/case managers. Therefore, although occupational therapists rarely have these children on their caseloads, they perceive themselves to be part of the team providing services. This finding could suggest that occupational therapists are part of the evaluation team, but often do not provide direct services or that they tend to provide consultation but do have them on their caseload. This finding also could indicate that in general, services to these children are low. If occupational therapists are the third highest professional category providing services to students with ED based on reported data from this survey, and the majority of occupational therapists only have 25% or fewer students with ED on caseload, then the concern arises are ALL of the needs of ALL students with ED being met effectively by other service providers (i.e. teachers/special education teachers and psychologists) or does occupational therapy have a knowledge base that needs to be tapped into to effectively meet the needs of more students with emotional disturbance.
The second barrier theme related to limitations in the effectiveness of intervention encompasses the following items that were rated by occupational therapists in the top ten barriers to service delivery for students with emotional disturbance: time constraints for service delivery due to high caseload numbers or therapists serving several different schools, lack of follow through by other IEP team members with OT recommendations, limited family follow through with recommendations for home, lack of occupational therapy staff training for intervening with the needs of students with emotional disturbance, limited space and/or equipment for providing occupational therapy services, and getting disruptive behaviors under control before being able to address other issues or student needs effectively. The first two barriers, most often reported in this category, can be grouped together as many therapists reported that time to meet with team members for consultation and collaboration is vital to the success of interventions, yet finding time to meet with other IEP team members due to their schedules or the therapists’ schedules and/or travel to various other schools is often impossible.

The final research question addressed the perceived effectiveness of occupational therapy intervention by therapists who intervene for psychosocial needs of students with emotional disturbance. About 50% (46.6%) responded that students had demonstrated positive outcomes based on occupational therapy intervention only 25-50% of the time or less. Several factors may be resulting in this finding. Multiple therapists commented on the difficulty of estimating the percentage of students who made positive change based on occupational therapy intervention alone when multiple disciplines may be addressing the same goal/objective using various intervention approaches. Also, many of the outcomes are subjective making them difficult to rate.
Clinical Implications / Conclusion

Therapists who lack knowledge, experience or skills in providing intervention to students with emotional disturbance should seek guidance from mentors with this expertise. Occupational therapists and other professionals working in the field of mental health can provide guidance and information for developing skills necessary to effectively intervene with this population. School-based occupational therapists who have expertise with this population need to make themselves available as mentors, providing fieldwork sites and training to occupational therapists seeking to expand their repertoire of service delivery in school-based practice to meet the needs of students with emotional disturbance.

A disturbing finding was that 66.5% of therapists providing school-based occupational therapy services to students with ED felt that their university training prepared them minimally or not at all to effectively meet the needs of students with ED. These results were slightly more positive than Barnes et al. (2003) findings that 72.9% of occupational therapists felt less than adequately prepared for intervening with students with emotional disturbance. Yet such a high percentage of occupational therapists feeling inadequately prepared to intervene with students with ED is concerning. Those therapists who reported receiving university training that prepared them well or very well reported better perceived student outcomes resulting from occupational therapy intervention. This finding implies that those who are inadequately prepared do not perceive their outcomes to be positive. University faculty need to be aware that graduates of occupational therapy programs often do not feel prepared to
intervene with this population in school-based settings. A concern noted by some therapists was the lack of mental health fieldwork sites and that mental health fieldwork is no longer a requirement for graduation, however occupational therapists are still expected to be able to provide intervention for students with ED.

Attending continuing education courses on interventions for students with ED is critical to competence in this area. Over 70% of therapists reported attending continuing education related to treating students with ED. The content of continuing education was not specified, however, it would be interesting to explore the specific content of continuing education that therapists attend for students with ED to determine if psychosocial and behavioral problems and interventions are the focus or if other interventions such as sensory integration are addressed. An unsettling finding was that over 28% of therapists reported having never attended continuing education pertaining to the emotionally disturbed population. Multiple therapists commented on the lack of continuing education courses specific to this population as being a barrier to providing services to students with emotional disturbance. Since almost any school-based therapist is likely to come into contact with students requiring psychosocial intervention needs, therapists should be seeking continuing education in this area, to grow professionally and to meet ethical responsibilities for staying abreast current treatment practices. Courses on interventions for children with mental health problems may be offered by professional groups outside occupational therapists. These courses may be helpful to practicing therapists until occupational therapy develops its own body of knowledge in this area.
Providing intervention to students with emotional disturbance in school-based practice is well within the scope of occupational therapy practice and therefore the low number of students with emotional disturbance on school-based occupational therapist caseloads is concerning. Occupational therapists need to advocate to provide services to these students. Prior to the reauthorization of IDEA 2004, individual school districts were responsible only for related services which IDEA defined as services necessary for a student to benefit from his or her special education program. This left a gray area for interpretation of what school districts and IEP teams felt were are necessary services. The expansion in the requirements for evaluation and IEP content and services that requires student’s development and functional needs to be addressed along with academic needs makes it clear that school districts (including occupational therapists) now have an obligation to address how students perform socially, behaviorally and functionally in school. Occupational therapists should embrace this opportunity to educate team members regarding occupational therapy’s scope of practice as it pertains to providing assessment and intervention to students with emotional disturbance.

**Study Limitations**

Survey research results can have threats to internal validity, as self-reporting may cause respondents to answer questions with “acceptable responses” rather than factual information. Potential low response rates to survey research can be a limitation, however with a response rate of 55.5%, this was not a limitation of this study. The sample frame, being only members of the School Section Special Interest Section, limited the generalizability of the results, as practitioners who are not AOTA members or members of this specific Special Interest Section, but who practice in school-based
settings may have been excluded from participating in the study. Additionally, given
time constraints, qualitative data were only reviewed by one individual which leaves the
potential for bias or misinterpretation when developing themes based on respondents’
answers.

**Recommendations for Future Research**

First, education of occupational therapists providing services to this
population needs to be expanded upon. Also, research that guides development of
models of practice to use with these children is critical.

The high rate of responses for using sensory strategies or sensorimotor
interventions, and social skills training with the ED population warrants in depth
research as to the effectiveness and rationale of these specific interventions.
Unfortunately the last few years have not yielded recommended research and results
suggested by Barnes et al. (2003), and if occupational therapists are going to market
themselves and advocate for involvement with students with ED to meet their
educational needs, extensive research is needed to provide an evidence base for
psychosocial occupational therapy intervention in school systems. Quantitative and
qualitative studies focusing on specific occupational therapy assessment, intervention
and psychosocial outcomes of students with emotional disturbance will be necessary to
develop an evidence base to guide best practice occupational therapy services for this
population.
LIST OF REFERENCES


American Occupational Therapy Association (2003). Member Survey, Practice Department. PRACDEPT@aota.org


Individuals with Disabilities Education Improvement Act (2004), Pub. L. 108-446.


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APPENDIX A

QUESTIONNAIRE COVER LETTER
FIRST MAILING
August 12, 2005

Dear School-Based Occupational Therapy Colleague,

As partial fulfillment of the requirements for obtaining my master’s degree at The Ohio State University, I am working with Jane Case-Smith, EdD, OTR/L, FAOTA to complete a thesis on the topic of School-Based Occupational Therapy for Students with Emotional Disturbances. You have been randomly selected from AOTA’s School System Special Interest Section computer database to be a participant in this study. Participation in this research study is completely voluntary. However, your input is of great importance to the outcome results of the study and I would appreciate your participation in my national research project. Complete confidentiality of your responses is assured; only group data will be reported.

I understand that time is valuable to everyone, but I hope that you can find approximately 10 minutes to complete the questionnaire and return it in the enclosed, postage paid envelope by August 31, 2005. Again, I would greatly appreciate your participation in my research. I look forward to receiving your completed questionnaire. Should you have any questions, you can contact me at archerjl@computech-online.net. Thank you in advance for your input!

Sincerely,

Lori Archer, OTR/L

Enc.
APPENDIX B

QUESTIONNAIRE COVER LETTER
FOLLOW UP MAILING
September 10, 2005

Dear School-Based Occupational Therapy Colleague,

This is a follow-up, reminder letter to a survey mailing that was sent to you in August. You were randomly selected from AOTA’s School System Special Interest Section computer database to be a participant in this study. As explained before, I am working with Jane Case-Smith, EdD, OTR/L, FAOTA to complete a thesis on the topic of School-Based Occupational Therapy for Students with Emotional Disturbances as partial fulfillment of the requirements for obtaining my master’s degree at The Ohio State University. As of the time of this mailing, I had not yet received your completed survey.

Participation in this research study is completely voluntary. However, your input is of great importance to the outcome results of the study and I would appreciate your participation in my national research project. Complete confidentiality of your responses is assured; only group data will be reported.

For your convenience, I have included another copy of the survey for completion. I understand that time is valuable to everyone, but I hope that you can find approximately 10 minutes to complete the questionnaire and return it in the enclosed, postage paid envelope by September 30, 2005. Again, I would greatly appreciate your participation in my research. I look forward to receiving your completed questionnaire. Should you have any questions, you can contact me at archerjl@computech-online.net. Thank you in advance for your input!

Sincerely,

Lori Archer, OTR/L

Enc.
APPENDIX C

STUDY QUESTIONNAIRE
School-based Occupational Therapy Practice For Students With Emotional Disturbances
Questionnaire

Please use the following definition as a foundation for answering the items on this questionnaire. Under Federal Law (IDEA 2004), Emotional Disturbance is defined as follows:

(i) The term 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

(ii) The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance

Section I

1. In what state do you practice? ___________________________

2. What is your practice setting?
   Public School___  Private School___  Other (Please Describe)________________________

3. What percentage of individuals on your caseload are identified as having emotional disturbance? ________ %
   • If your answer is 0%, please go to Section IV

4. What is/are the age range(s) of students with emotional disturbances who receive occupational therapy services? Please check all that apply.
   _____ a. 3-5 years _____ b. Grades K-5 _____ c. Grades 6-8 _____ d. Grades 9-Graduation

Section II

Please rate the following items using this scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always.

5. For your students with emotional disturbances who receive occupational therapy services, rate:
   • how often are the following educational outcomes addressed in their IEP goals/objectives?
   • how often is OT a service to address the goal areas?

   - ACTIVITIES OF DAILY LIVING
     a) Increased independence in dressing, eating, feeding, functional mobility, personal hygiene and/or grooming.
     Goal/Objective 1 2 3 4 5
     Addressed by OT 1 2 3 4 5

   - MOTOR SKILLS
     a) Improvement in posture, mobility, coordination and/or strength
     Goal/Objective 1 2 3 4 5
     Addressed by OT 1 2 3 4 5

   - PROCESS SKILLS
     a) Keeps work area organized
     Goal/Objective 1 2 3 4 5
     Addressed by OT 1 2 3 4 5
Please rate each item using the following scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always.

**COMMUNICATION/INTERACTION SKILLS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Goal/Objective</th>
<th>Addressed by OT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Maintains appropriate social/physical boundaries</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>b) Uses good manners</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>c) Observes rules regarding turn taking/</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>waits for turn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Responds appropriately to social interaction by adults/peers</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>e) Works/plays in groups without disrupting the work/play of others</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>f) Shares materials/asks permission to use another’s belongings</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>g) Modulates volume and tone of voice to suit context</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>h) Works cooperatively with other students on all steps of a goal-directed activity</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**GLOBAL/SPECIFIC MENTAL FUNCTIONS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Goal/Objective</th>
<th>Addressed by OT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Maintains attention to task</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>b) Maintains behavioral control in small/large groups</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>c) Expresses anger using non-aggressive means rather than physical action</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>d) Appropriately identifies and shares feelings/emotions with adults/peers</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**COGNITIVE/BEHAVIORAL TASKS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Goal/Objective</th>
<th>Addressed by OT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Displays appropriate restraint regarding self-stimulation</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>b) Follows rules regarding movement around the classroom</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>c) Works productively on own work, even when seated in close proximity to others (distractions)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

6. What types of occupational therapy interventions do you use for students with emotional disturbances? Please rate each item using the following scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

- **INTERVENTION**
  
a) Therapeutic Use of Self  
   ![Rating Scale]
  
b) Therapeutic Use of Occupations and Activities  
   ![Rating Scale]
  
c) Consultation Process  
   ![Rating Scale]
  
d) Educational Process  
   ![Rating Scale]

7. Please list specific interventions (e.g. behavior modification, social skills training, sensory integration) used to treat students with emotional disturbances:

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

8. How often is OT intervention for students with emotional disturbances provided using the following service delivery methods? (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always)

- **METHOD OF SERVICE DELIVERY**
  
a) Individual Only  
   ![Rating Scale]
  
b) Group Only  
   ![Rating Scale]
  
c) Combination of Individual and Group  
   ![Rating Scale]
  
d) Consultation Only  
   ![Rating Scale]
  
e) Direct Service Only  
   ![Rating Scale]
  
f) Combination of Consultation and Direct  
   ![Rating Scale]
  
g) Seen in Classroom  
   ![Rating Scale]
  
h) Therapy Room / Pull Out  
   ![Rating Scale]

9. In your opinion, what percentage of students with emotional disturbances have shown positive outcomes due to occupational therapy intervention? Please check only one answer.

   _____ a. 0%  _____ b. 1-25%  _____ c. 26-50%  _____ d. 51-75%  _____ e. 76-100%
Section IV

10. How well did your university-based occupational therapy education prepare you for school-based intervention for children with emotional disturbances? (Please circle only one response)

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Minimally</th>
<th>Adequately</th>
<th>Well</th>
<th>Exceptionally Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. In what year did you complete your university-based OT education? __________

12. What is your level of Education?
   _____ a. Bachelors Degree   _____ b. Masters Degree   _____ c. Doctorate Degree

13. How often do you attend continuing education courses related to providing occupational therapy services to students with emotional disturbances? (Please mark only one)
   _____ a. Annually   _____ b. Every 2-3 yrs   _____ c. Every 3-5 yrs   _____ d. Greater than 5 yrs   _____ e. Never

14. Who is/are the IEP team member(s) that provide intervention to address the psychosocial needs of students with emotional disturbances? (Mark all that apply)
   _____ a. OT   _____ b. Psychologist   _____ c. Teacher   _____ d. School Counselor   _____ e. Other (Please describe)

15. Please list any obstacles to providing occupational therapy services to students with emotional disturbances:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Thank you for your time! Please return this questionnaire to the address below, in the enclosed, prepaid envelope, by September 30, 2005. Your name and responses will remain completely confidential.

Lori Archer, OTR/L & Jane Case-Smith, EdD, OTR/L, FAOTA
406 Atwell Hall
453 West 10th Avenue
Columbus, OH 43210