BRIEF REPORT

Perceptions Regarding School-Based Occupational Therapy for Children With Emotional Disturbances

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KEY WORDS
- ancillary services
- mental disabilities
- special education

The purpose of this study was to identify the perceived appropriateness, extent, and types of services provided by occupational therapists to children with emotional disturbances in public schools. A nationally mailed survey was conducted of randomly selected school occupational therapists derived from the American Occupational Therapy Association School System Special Interest Section list. The sampling frame was 982 with a response rate of 48% ($n = 476$).

Eighty-seven percent of all respondents were supportive of school occupational therapy for students with emotional disturbances, although these students made up only a small proportion of their caseload. The therapists indicated that a variety of intervention approaches were used with most targeting educational areas, especially handwriting. The most commonly reported intervention was sensory integration.

Many respondents perceived that they could not provide effective interventions because they were not appropriately trained. Perceived lack of knowledge and confusion about occupational therapy's role may lead to underutilization of occupational therapy for addressing the complex needs of children with emotional disturbances. Further research and discussion are needed in the profession to arrive at consensus regarding what approaches are most appropriate and effective in schools.

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School-aged children with emotional disturbances may have difficulty performing school occupations such as following directions, completing written work, communicating, engaging in group activities, and regulating behavior (Prior, 2001). They may exhibit problems such as depression, irritability, aggression, and lethargy and have difficulty in organizational, interpersonal, coping, and learning skills. Children with emotional disturbances are at risk to fail more courses, have lower grades, be absent more often, and be retained at a grade more often than students with other disabilities (Office of Special Education Programs, 1999).

The term "emotional disturbances" is defined under the Individuals With Disabilities Education Act of 1997 (IDEA 97): (i)…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 (National Information Center for Children and Youth With Disabilities [NICHCY], 1999).

According to NICHCY (1999), there were 447,426 children, ages 6–21 years, with emotional disturbances served under IDEA 97 for the 1996–1997 school year. This number excluded children with men-

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tal retardation, autism, and traumatic brain injury. Unfortunately, children with emotional disturbances are often not identified under IDEA 97 as being eligible for special education or related services or both (including occupational therapy) until the effects of their disabilities become significant (Office of Special Education Programs, 2000). Additionally, fewer children with emotional disturbances (23.5%) were placed in regular classrooms than all other disability types (45.4%) in 1996 (U.S. Department of Education, 1999). Despite research indicating intervention can be effective with these children, many schools and communities are not prepared to meet their needs (Florey, 1998; Office of Special Education Programs, 2000; U.S. Public Health Service, 2000).

Occupational therapy has historically incorporated psychosocial dimensions into holistic perspectives for intervention across all age groups. Occupational therapists consider how psychosocial factors, among others, contribute to clients' occupations (Fidler, 1995; Henry & Coster, 1996). Thus, school system occupational therapists have the potential to assist students with emotional disturbances that adversely affect the students' performance (Grove, 2002).

Yet, occupational therapy literature is insufficient in addressing issues related to children with emotional disturbances in the school systems (Johansson, 1999a). Textbooks commonly used in occupational therapy curricula across the country appear to contain less information on interventions for children with psychosocial problems than other developmental disorders. Additionally, a Robert Wood Johnson Foundation study (1988) found that occupational therapists' caseloads in special education settings were comprised mainly of children with physical impairments and mental retardation. Powell (1994) conducted a mail survey of occupational therapists in Michigan, (n = 136) finding that only 15% of the respondents reported treatment of students with psychosocial difficulties. School system occupational therapists appear to be focusing on interventions related to handwriting, sensory awareness–processing, gross and fine motor skills, and perceptual skills (Clark, 2001; Johansson, 1999a). Grove (2002) indicated that children with psychosocial disorders may be overlooked due to large occupational therapy caseloads, lack of other professionals' knowledge about occupational therapy's potential contributions, and occupational therapists' anxiety about addressing these problem areas. There is little research to provide support for evidence-based occupational therapy practice for children with emotional disturbances (Jackson, 2001; Lougher, 2001; Sholle-Martin & Alessi, 1990).

Occupational therapy's claim to work with the whole person (Olson, 2001) may erode in pediatric practice if mental health issues are ignored (Sholle-Martin & Alessi, 1990). Florey (1989) indicated that school occupational therapists might lose opportunities to work with children with emotional disturbances. However, occupational therapists are becoming aware of the need to provide interventions for these children (Jackson, 2001; Johansson, 1999b).

The extent to which school occupational therapy services are provided for children with emotional disturbances and the types of services provided are not known due to lack of research. The purpose of this study was to identify the perceived appropriateness, extent, and types of services provided by school occupational therapists to this group of children. We sought to identify treatment approaches utilized by occupational therapists who actually provided services to students with emotional disturbances. Our study also addressed possible obstacles to school occupational therapy for children with emotional disturbances, based on the assertions in the occupational therapy literature that occupational therapy is underutilized yet has much to offer this population. Research questions were:

1. What is the percentage of students with emotional disturbances that comprise the occupational therapy caseloads?
2. What are occupational therapy interventions and service delivery approaches used for children with emotional disturbances and the performance areas addressed by interventions?
3. How do respondents perceive appropriateness of school occupational therapy interventions for children with emotional disturbances?
4. What are the respondents' perceptions of their educational preparation and their needs for further continuing education for services for this population?
5. What do the respondents perceive to be obstacles to occupational therapy for students with emotional disturbances?

Method

A national survey was conducted using a questionnaire, "School Occupational Therapy Practice for Students with Emotional Disturbances Questionnaire." The research methods followed the mail questionnaire procedures suggested by Babbie (1990). Three phases were used: A prenotification phase, data collection phase (mailing of questionnaires) and a follow-up phase (a second mailing of questionnaires to nonrespondents and a final postcard to remaining nonrespondents). The prenotification cards were mailed in December 2000 and the last questionnaires were received in March 2001.

The American Occupational Therapy Association (AOTA) provided a computer-generated list of randomly selected members of the AOTA School System Special Interest Section who indicated that their primary employment was in public schools. The sampling frame was 982. A sample size of n = 400 was needed for a 5% tolerated error at a 95% confidence level (Rubenstein, 1995). The number of actual respondents was 476.

Instrumentation and Development

The questionnaire, "School Occupational Therapy Practice for Students with Emotional Disturbances Questionnaire" was a 16-item instrument. Items 1–3 were questions concerning the therapist's employment in school systems and percentage of students with the diagnosis of emotional disturbance on caseloads. If a respondent served students with emotional disturbances, then he or she was asked to respond to items 4–10, concerning performance areas and components addressed and treatment approaches used. All respondents were asked to answer items 11–16 about their views of school occupational therapy for children with emotional disturbances, views about educational prepara-

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tion, and obstacles to school occupational therapy for this population.

The questionnaire was developed because a literature review indicated no available instruments for this topic. It was developed by four occupational therapists with expertise in public school-based and psychosocial occupational therapy, and by an educational psychologist with expertise in survey research methods. Accepted research procedures were conducted to ensure clarity and content validity of the instrument. Initial feedback was obtained from three experienced school occupational therapists concerning content and clarity of the questionnaire. Next, input was solicited from 17 school occupational therapists concerning their perceptions of each questionnaire item. Each therapist ranked his or her agreement regarding the importance and clarity of questionnaire items on a scale of 1–5 (1 = strongly disagree, 5 = strongly agree). Their input was positive about the importance of questionnaire items, with a range of 3.9–4.8 (mean = 4.5), and about the clarity of items, with a range of 3.8–4.7 (mean = 4.3).

Results

There were 476 respondents from 49 states, which is a 48% response rate from the sampling frame of 982. Of the 476 respondents, 393 stated that they work in the public schools and, of these, 224 indicated that they worked with students with emotional disturbances. The mean percentage of students with emotional disturbance on a therapist's caseload was 10.9%. The majority of students with emotional disturbances served by occupational therapists in this study were in grades K–5 (77.2%).

Occupational Therapy Interventions

The 224 respondents who stated that they worked with students with emotional disturbances were asked to check all student performance areas and components that were addressed for these children (Table 1). Of the performance areas checked, the "traditional" academic tasks were selected most often, with Handwriting selected by 91% of respondents. Fewer respondents selected performance areas involving activities of daily living. Of the performance components checked, Fine Motor–Dexterity was selected most often. The psychosocial performance components (attention span, self-control, organizational skills, managing transitions, interpersonal skills, and social conduct) were selected less often but by at least 50% of the respondents.

Table 1. Percent of Therapists Addressing Various Performance Areas–Components in Occupational Therapy Intervention With Children With Emotional Disturbances (*n* = 224).

	Number	Percent
Performance Areas		
Handwriting	205	91.5%
Computer Skills	129	57.6%
Play–Recreation	111	49.6%
Functional Communication	109	48.6%
Student Role Performance	106	47.3%
Dressing	90	40.1%
Safety Procedures	82	36.6%
Clean-Up	72	32.1%
Grooming	62	27.7%
Eating & Drinking	57	25.4%
Toilet Hygiene	48	21.4%
Functional Mobility	44	19.6%
Performance Components		
Fine Motor Control–Dexterity	199	88.8%
Attention Span	183	81.7%
Self-Control	172	76.8%
Organizational Skills	166	74.1%
Managing Transitions	157	70.1%
Interpersonal Skills	135	60.3%
Social Conduct	124	55.4%
Motor Control	122	54.5%
Postural Control	108	48.2%
Learning	89	39.7%
Memory	80	35.7%

Treatment approaches targeting educational areas were selected in the following order: School Work Tasks; Environmental Modification; Play Skills; Social Skills; and Arts and Crafts. Traditional treatment approaches were selected in the following frequency order: Sensory Integration; Visual Motor Skills; Visual Perception; and Alert Program (Williams & Shellenberger, 1994). Behavior Modification–Acquisitional Approaches was selected by 66.5% (Table 2).

Group interventions were used by 28.6% of these respondents. Group interventions most commonly used included sensory modulation groups, such as the Alert Program (Williams & Shellenberger, 1994); sensory integration groups; groups with mixed goals, such as task groups, crafts groups, and fine and gross motor groups; and direct social skills training groups, such as friendship circles and groups for learning social cues.

Designation of Provider

The 224 respondents who provided occupational therapy services to children with emotional disturbances were asked "Who provides OT-related interventions for your students with emotional disturbances?" The majority of these respondents (68%) indicated that the teachers and occupational therapists provided services. Twenty-five percent of the respondents reported that services were provided solely by the occupational therapist. Seven percent indicated that teaching staff or other related services provided occupational therapy-related interventions.

Appropriateness of Occupational Therapy Services

All respondents were asked "Do you feel it is appropriate for OT to work with students with emotional disturbances in public schools?" Of 476 total respondents, 87.4% (416) indicated that it was appropriate for school occupational therapists to work with this population. Of the 393 respondents who provided occupational therapy services in the schools, 90.1% (354) indicated this was appropriate. Finally, of those 224 respondents who actually provided occupational therapy services to students with emotional disturbances, 97.3% (218) indicated that this was appropriate. The 12.6% of the 476 total respondents who indicated occupational therapy intervention was not appropriate stated they felt occupational

Table 2. Percent of Therapists Using Various Treatment Approaches With Children With Emotional Disabilities (*n* = 224).

	Number	Percent
Sensory Integration	181	80.8%
Visual Motor Skills	171	76.3%
School Work Tasks	155	69.2%
Behavior Modification–Acquisitional	149	66.5%
Visual Perception	126	56.2%
Environmental Modification	125	55.8%
Play Skills	119	53.1%
Social Skills	112	50%
Alert Program	105	46.8%
Arts & Crafts	105	46.8%
Home Living Tasks	32	14.2%
Community Work Tasks	23	10.3%
Violence Prevention	20	8.9%
Projective Techniques	13	5.8%
Use of Group Interventions	65	29%

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therapists were not adequately trained to work with this population or that emotional disturbance alone does not warrant occupational therapy intervention.

Obstacles to Occupational Therapy for Students With Emotional Disturbances

All respondents were asked to list any obstacles to providing occupational therapy services to school aged students with emotional disturbances, to which 373 respondents provided written responses. The affinities (themes) that emerged from their responses are summarized as: (1) Role confusion ("in this district OT has only historically supported handwriting"); (2) limited knowledge base ("what am I supposed to do with these children?"); (3) lack of knowledge–support from the team ("at my last job the school psychologist was very protective of his turf" and "psychologists' lack of understanding of behaviors related to sensory issues and the importance of including OT in process"); (4) administrative factors ("most OTs don't have additional time, and most school systems wouldn't pay for additional OTs"); (5) obstacles to efficient teaming ("finding the time to plan and share information with other team members is a challenge"); (6) classroom issues ("getting teachers to allow more self-calming activities with their behavioral management style of contacting [sic] behaviors"); (7) the nature of emotional disturbance ("some of my students are very violent"); (8) and difficulties with parents ("can't be reached, are unresponsive, or just not available").

Perceived Educational Preparation of the Respondents

All respondents were asked "How well did your university-based OT education prepare you for intervention with children with emotional disturbances?" There were 214 responses to this question with a response range of: 19.2% felt not at all prepared, 53.7% felt somewhat prepared, 17.3% felt adequately prepared, 6.1% felt well prepared, and 3.7% felt exceptionally prepared. Over half indicated continuing education was needed for learning methods to use with this population. One third felt there was a need for textbooks, journal articles, and videos. Also of note was a need for mentoring and networking with other therapists who work with this population.

Current Continuing Education

Respondents were asked, "Please list any continuing education about this population in which you have participated." Responses (316) were tallied for continuing education content. Sensory modulation and sensory integration workshops accounted for 44% of the content of continuing education, while information about attention deficit disorder, attention deficit hyperactivity disorder, and autism was covered in 22% of the continuing education offerings. Content pertaining to specific psychosocial issues, such as child and adolescent mental health and psychosocial OT in schools, comprised 21% of the continuing education, with behavioral management and handling techniques covered in 10% of the classes. Nine percent of the respondents stated that they had not participated in any continuing education for this population because it was not offered, was too far away, or they "just didn't do it."

Limitations

As with any mail questionnaire, the use of self-report brings into question the desire to report acceptable responses by the participants, which may be considered a threat to internal validity. A response rate of 48% may also be considered a limitation. Also, the sampling frame was derived from the population of school occupational therapists who were AOTA members. This can be considered a limitation for generalization because it does not represent those school occupational therapists who are not AOTA members.

Discussion

Clearly, the majority of the respondents felt occupational therapy could provide a needed service to students with emotional disturbances despite the fact that these students made up a small proportion of the caseload of the respondents who did work with this population. The small proportion of caseload is in keeping with both Powell (1994) and the Robert Wood Johnson Foundation study (1988), which found fewer children with emotional disturbances on occupational therapists' caseloads in special education settings compared to those with other disabilities. This finding is of special concern because of the large number of children with emotional disturbances within special education (NICHCY, 1999). The implication is that many children who could be treated are not receiving the intervention they need. Occupational therapy leaders have called on practitioners to focus more on the "social behavior problems, violence, and suicide that are so prevalent among America's youth" (Johansson, 1999b). The philosophy of the profession supports occupational therapists working holistically with individuals' physical and psychiatric issues (Grove, 2002; Olson, 2001). The support by school occupational therapists for intervention with this population, as expressed in this study, affirms these professional beliefs. The results of this study support Sholle-Martin and Alessi (1990) findings that more evidence-based research is needed to help school therapists work with children with emotional disturbances.

The respondents indicated a range of performance areas and components that were addressed by a variety of intervention approaches. The heavy emphasis by the respondents on performance components and areas that reflected sensorimotor impairments is thought provoking. The comments of the respondents working with this population appeared to show a split concerning the focus of the interventions. Some respondents indicated a belief that occupational therapy should work directly with the psychosocial components of the disability. Others indicated that occupational therapy should work with these students only if there are other performance deficits (i.e., visual perception, fine motor, handwriting) that accompany the disability of emotional disturbance. One therapist commented, "We only get referrals in our district if the student has other difficulties such as activities of daily living, or motor, or if all else has failed!" This apparent confusion about the direction of occupational therapy intervention may be partly due to the lack of evidence-based research that supports best practices for these children and a need to understand any associations

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between sensorimotor and psychosocial behaviors. Further research and discussion are needed in the profession to arrive at consensus regarding what approaches are most appropriate and effective for children with emotional disturbances in schools. With more clarity, advocacy for occupational therapy treatment with this group of children can be facilitated.

Transdisciplinary responsibility was reported for occupational therapy-related interventions, as the majority of occupational therapists and teaching staff shared in the provision of occupational therapy-related interventions. Team collaboration was felt to be important and some respondents indicated reservations in providing services to this group of students without collaboration with psychologists and or counselors.

Pre-service (university based) and in-service education in the provision of school occupational therapy for children with emotional disturbances was reported as inadequate for the majority of the respondents. Respondents also indicated a need for mentoring. It appears that even though many occupational therapists wanted to work with students with emotional disturbances and felt they should, at the time of the study they perceived they could not provide effective interventions because of their beliefs that they were not adequately trained.

In summary, the results of this study indicate support and interest in the provision of school-based occupational therapy for students with emotional disturbances. Further efforts in formal and continuing education may enhance therapists' abilities and confidence to provide services for this population. Because so many respondents who did work with this population indicated the use of sensorimotor interventions, future research should explore the underlying rationale for this occurrence. Future research is also needed to provide an evidence base for psychosocial occupational therapy in school systems. The fostering of research, education, and mentoring of school-based occupational therapy for children with emotional disturbances will help prepare occupational therapists to utilize our holistic philosophy to effectively serve this population. ▲

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References

Babbie, E. (1990). *Survey research methods* (2nd ed.). Belmont, CA: Wadsworth Publishing.

Clark, G. (2001). Children often overlooked for occupational therapy services in educational settings. *School System Special Interest Section Quarterly, 8*(3), 1–3.

Fidler, G. (1995). Position paper: The psychosocial core of occupational therapy. *American Journal of Occupational Therapy, 49,* 1021–1022.

Florey, L. (1989). Nationally speaking: Treating the whole child: Rhetoric or reality? *American Journal of Occupational Therapy, 43,* 365–369.

Florey, L. (1998). Psychosocial dysfunction in childhood and adolescence. In M. Neistadt, & E. Crepeau (Eds.), *Willard & Spackman's occupational therapy* (9th ed., pp. 622–635). Philadelphia: Lippincott.

Grove, R. (2002). OT in the schools: Embracing our psychosocial roots. *OT Practice, (7)*6, 21–25.

Henry, A., & Coster, W. (1996). Predictors of functional outcome among adolescents & young adults with psychotic disorders. *American Journal of Occupational Therapy, 50,* 171–181.

Individuals With Disabilities Education Act of 1997, U.S.C. Pub. L. No. 105–117.

Jackson, L. (2001). A national office update: Meeting the psychosocial and mental health needs of students. *School System Special Interest Section Quarterly, 8*(3), 3–4.

Johansson, C. (1999a). Let's take a stand on school violence. *OT Week,* 8–9.

Johansson, C. (1999b). A role for OT in preventing school violence. *OT Week,* i, vi.

Lougher, L. (2001). Occupational therapy in child and adolescent mental health services. In L. Lougher, (Ed.) *Occupational therapy for child and adolescent mental health.* London: Churchill Livingstone.

NICHCY. (1999). *General information about emotional disturbance (Fact Sheet Number 5).* Retrieved March 28, 2000, from http://www.nichcy.org/pubs/factshe/fs5txxt.htm

Office of Special Education Programs. (1999). *Twentieth annual report to Congress on the implementation of the Individuals With Disabilities Education Act.* Retrieved February 27, 2003, from http://www.ed.gov/offices/OSERS/OSEP/Research/OSEP98AnlRpt

Office of Special Education Programs. (2000). *IDEAS that work: OSEP's five strategic directions.* Retrieved March 22, 2000, from http://www.ed.gov/offices/OSERS/OSEP

Olson, L. (2001). Child psychiatry in the USA. In L. Lougher (Ed.), *Occupational therapy for child and adolescent mental health.* London: Churchill Livingstone.

Powell, N. (1994). Content for educational programs in school-based occupational therapy from a practice perspective. *American Journal of Occupational Therapy, 48,* 130–137.

Prior, K. (2001). Occupational therapy with school-aged children. In L. Lougher (Ed.), *Occupational therapy for child and adolescent mental health.* New York: Churchill Livingstone.

Robert Wood Johnson Foundation. (1988). *Serving handicapped children: A special report* (No. 1). Princeton, NJ: Author.

Rubenstein, S. M. (1995). *Surveying public opinion.* Belmont, CA: Wadsworth Pub. Co.

Sholle-Martin, S., & Alessi, N. (1990). Formulating a role for occupational therapy in child psychiatry: A clinical application. *American Journal of Occupational Therapy, 44,* 871–882.

U.S. Department of Education. (1999). *Office of Special Education and Rehabilitative Services: Annual report to Congress on the implementation of the Individuals With Disabilities Education Act.* Retrieved March 23, 2000, from http://www.ed.gov/offices/OSERS

U.S. Public Health Service. (2000). *Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda.* Washington, DC: Department of Health & Human Services, 1–57. Retrieved March 2, 2003, http://www.surgeongeneral.gov/topics/cmh/childreport_htm

Williams, M., & Shellenberger, S. (1994). *How does your engine run? A leader's guide to the Alert Program for self-regulation.* Albuquerque, NM: TherapyWorks.

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