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Role of the Middle School Occupational Therapist: An Initial Exploration

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Of the nearly 108,880 occupational therapy jobs held in the United States in 2010, approximately 15% were in school-based settings, including preschools, and elementary, middle, and secondary schools (U.S. Department of Labor, 2012). Although a significant number of studies have explored occupational therapy interventions in elementary schools (Clark, Jackson, & Polichino, 2011; Spencer, Turkett, Vaughan, & Koenig, 2006), there is a paucity of research exploring interventions in middle schools (Andrew, Penny, Simpson, Funnell, & Mulligan, 2004; Eccles, Barber, Stone, & Hunt, 2003; Humphrey, 2002).

This article intends to review best practice in school-based settings with an emphasis on the middle school setting. The findings of three pilot studies targeted at exploring the scope and practice patterns of occupational therapy practitioners working in middle schools in the Northeast will also be presented. Using both the *Occupational Therapy Practice Framework: Domain and Process* (3rd ed.; American Occupational Therapy Association [AOTA], 2014) and documents regarding best practice in conjunction with the findings of these pilot studies, further considerations and recommendations will be offered to support practitioners working in middle schools.

Role of the Occupational Therapy Practitioner in the Literature

There is little current evidence that explores how occupational therapy interventions adapt to the physical, psychological, and social changes of adolescence, and available literature is approximately 10 years old (Andrew et al., 2004; Eccles et al., 2003; Humphrey, 2002). Areas of intervention appear to be largely focused on handwriting (Schneck & Amundson, 2010), visual perceptual skills, and sensory processing skills including self-regulation and organization (Powell, 1994; Spencer et al., 2006). The research is also limited in that it has primarily studied children with individualized education programs (IEPs); therefore, only children classified as having a disability have been included. Although occupational therapy practitioners are able to utilize tier interventions such as Response to Intervention (RtI) as a means for delivering services to students within the general education setting, to date there has been very limited research available regarding efficacy and involvement in tier interventions (Cahill, McGuire, Krumdick, & Lee, 2014).

Meaningful occupations for students in middle school settings differ dramatically from those of students in preschool and elementary school. Occupational therapy practitioners assist students to develop the ability to complete those occupations that allow for success in their current academic grade but also for successful transitioning between grade levels. These occupations may be both academic and non-academic, such as study habits, problem solving, independent self-care, and social skills (AOTA, 2010).

Current Evidence Gathered

Two qualitative inquiries have been conducted with occupational therapists working in middle school settings to gauge their perception of their roles and scope of practice (Chubet, Dulanie, Giordano, & Rotko, 2014; Ciorciari et al., 2012). Both studies used a phenomenological approach and convenience sampling, and followed a semi-structured interview format. In the first study (Ciorciari et al., 2012), six occupational therapists were recruited from school systems in Connecticut and New York. The second study (Chubet et al., 2014) consisted of nine occupational therapists from New York, New Jersey, and Connecticut. The questions were developed collaboratively by the researchers and were based on the *Occupational Therapy Practice Framework: Domain and Process* (2nd ed.; AOTA, 2008) to ensure that they aligned with the profession's standards. Interviews were transcribed and coded, and categories were developed. Underlying themes were identified based on these categories.

In the first study (Ciorciari et al., 2012), themes that emerged included: (1) students' skills have peaked and habits have formed; (2) school-based therapy is not always academic; (3) each student is an individual; and (4) middle school students begin to advocate for themselves. Therapists frequently indicated that they continue to work on foundational skills rather than occupation-based skills appropriate for an adolescent, although they did indicate that in elementary school the intervention focuses on facilitating developmentally appropriate performance components (bottom-up interventions), whereas in middle school the focus is on more occupation-based activities (top-down interventions). The therapists reported that they often felt as though skills have peaked and habits have formed by the time children enter the middle school grades; however, they still continue to try to remediate these skills in their intervention. A concrete example of this can be found in handwriting. If a child has been unable to learn how to write by the time he or she is in middle school, it may indicate that the child does not have the cognitive or physical capacity to develop that skill. Despite this fact, therapists reported that they continue to address handwriting rather than seek out reasonable accommodations or modifications to address the child's developmental level and educational trajectory.

Data analysis from the second study (Chubet et al., 2014) identified a feeling of inconsistency in the perceived roles of the participating middle school occupational therapists. Therapists identified an increased demand for independence in middle school, not only in academics but also in areas such as social emotional regulation, self-management, and advocacy. The participants indicated that social or emotional demands are a large factor that influences functioning at the middle school level. However, social and emotional

skills did not come up in the interviews as an area that any of the participants actually addressed. Instead, participants were still focused on handwriting and other foundational performance skills.

A consistent theme that emerged from both studies was that the participating therapists appeared to use similar theories and models as they do in elementary schools to guide their interventions at the middle school level regardless of how appropriate they are for meeting the middle school students' needs. However, therapists did report a shift from remedial approaches to compensatory approaches, and more of an emphasis on "life skills" and prevocational development as children move into middle school. For example, they indicated that they do work, at least to some extent, on more organizational skills to allow students to complete tasks such as organizing their lockers or notebooks (Ciorciari et al., 2012).

In both studies, the sample size, use of a convenience sample from a small geographic area, the brevity of the interviews, and the lack of follow-up interviews to obtain more information were all limitations.

A quantitative, web-based survey of middle school occupational therapists has also been conducted (Chacon-Baker, Ellen, Pomar, & Stolz, 2013). This pilot study surveyed 23 occupational therapists working in New Jersey, New York, and Connecticut to determine their practice patterns. The survey addressed demographics, types of interventions, and intervention approaches implemented in the middle school setting. Open-ended questions aimed at gathering additional feedback from participants regarding the areas they found most important to address were also included.

Results of this pilot study suggested that the participating middle school occupational therapists implemented "modify" (compensation or adaptation) and "create/promote" intervention approaches more frequently than any other (Chacon-Baker et al., 2013). This finding indicates that these therapists focused on collaborating with students to adapt pre-established skills while continuing to work on developing other skills. This also supports the qualitative findings that call for occupational therapy practitioners to incorporate compensatory approaches for middle school students. However, it was unclear if the participating therapists understood the meaning of create/promote as operationalized in the *Framework* because they cited remedial types of tasks as opposed to wellness or prevention types of interventions when indicating specific activities that they addressed with students.

The findings also indicated that a large percentage of the participants in this study ranked students' functional independence, access to the curriculum, and sensory integration/sensory processing skills as being the most important skills for adolescents. However, they ranked handwriting and fine motor ability, developing compensatory strategies, and organization as being the most important skills to address in treatment (Chacon-Baker et al., 2013). The lack of congruence between what the participants believed to be important skills and what skills they addressed in therapy is consistent with the qualitative findings that participants did not have a consistent conceptualization of their roles in the middle school setting.

Student Needs in Middle Schools

An important area of development in middle school settings is those needs related to mental health and psychosocial functioning. Once a child transitions out of elementary school and into the beginning stages of adolescence, skill acquisition slows, making way for physical and physiological maturation and refinement of psychosocial development (Humphrey, 2002). These social and emotional demands have a significant impact on the academic functioning of middle school students, and therefore should be considered as pivotal areas of intervention (Gumora & Arsenio, 2002).

Academic skills such as organizational abilities and executive functioning should also be considered, as these are key areas in which occupational therapy intervention can have a significant impact on a student's overall functioning and academic success (AOTA, 2014).

Implications for Practice

For students to be successful in their occupational roles within the school setting, occupational therapy intervention needs to address increased independence in academics and social emotional development, as well as psychosocial and mental health issues. More classroom-based services should be provided, allowing students to access their curriculum in the least restrictive environment, and a stronger emphasis should be placed on collaboration and adaptations (Handley-More, Hollenbeck, Orentlicher, & Wall, 2013). Additionally, tiered interventions such as RtI can be utilized to provide a wider range of services to address the needs of students overall (Frolek Clark & Polichino, 2013). These changes in service delivery would allow for greater growth in student independence, and would better match the demands of the middle school environment. Increased independence and improved social skills will also assist the student in eventually making a successful transition to adult life.

In addition, adolescents have the ability to express what they deem as meaningful occupations within the academic setting. Using occupation-based models of assessment, such as the Canadian Occupational Performance Measure (Law et al., 2005) and intervention models such as the Person Environment Occupation Performance model (Christiansen & Baum, 1991; Christiansen, Baum, & Bass-Haugen, 2005), would provide an opportunity for occupational therapy practitioners to collaborate with students to determine appropriate and relevant goals, which in turn may lead to greater motivation and engagement in the therapy process on the part of students.

Conclusions

As a profession, further exploration must be done to better understand the unique issues faced by adolescents and how to best align our practice with those specific needs. Using the guidelines for best practice (Frolek Clark & Chandler, 2013; Handley-More et al., 2013) as well as concepts from the *Framework*, practitioners can begin to develop strategies to transition to more occupation-based and age-appropriate interventions. In doing so, occupational therapy practitioners working in middle school settings can be more cognizant of this needed adjustment in intervention to address developmentally appropriate skills that will better lead to student success in middle school and beyond.

AOTA has several resources addressing the role of occupational therapy in school-based settings (AOTA, 2010) and how to provide specific interventions within school settings (AOTA, 2009),

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including the School Mental Health Tool Kit, available on the AOTA website. There are also resources that identify best practice interventions as those provided within the natural school environment, while the student engages in the specific tasks and activities with which he or she requires assistance (Clark et al., 2011; Frolek Clark & Chandler, 2013; Handley-More et al., 2013). Additional best practice models include collaborating with parents, educators, and other team members to effectively promote carryover and encourage academic success, and addressing mental health issues, such as positive behavioral support measures. Occupational therapy services should also be considered in light of new educational initiatives such as common core standards, focus on literacy, whole school initiatives to improve safety and mental health, transition preparation, and tier interventions.

Occupational therapy practitioners working in middle schools need to address the unique needs of these students. These needs may include specific academic areas such as reading, writing, and math, or they may be less academic in nature; for example self-help and prevocational skills. Occupational therapists must evaluate each student to determine areas of occupation requiring attention, and subsequently develop a plan to address these areas using evidence-based practice to substantiate their interventions. ●

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Farewell From the Chairperson

Dottie Handley-More, MS, OTR/L

It has been a privilege and a pleasure to serve as chairperson for the Early Intervention and Schools Special Interest Section (EISSIS) for the past 3 years. A sincere thank you to EISSIS Standing Committee members Meira Orentlicher (*Quarterly* Editor), Elizabeth Wall (Professional Development Coordinator, Communications), and Jan Hollenbeck (Professional Development Coordinator, Education/Research) for their professional expertise, extensive contributions and commitment to serving the members, the Association, and the profession.

Over the past 3 years, the committee has worked to address the ongoing challenges that school and early intervention practitioners face as they strive to apply evidence to strengthen outcomes, advocate for occupation-based services, and work toward becoming involved in leadership roles within a climate of education reform, limited budgets, and increased accountability. Committee activities have addressed emerging areas of practice, best practice, advocacy and leadership within school and early intervention settings. *Quarterly* articles, conference sessions, and continuing education articles have highlighted topics related to early childhood transitions, secondary transitions, collaboration, and workload/caseload issues. We have also discussed the role of occupational therapy practitioners in multi-tiered systems of support (such as response to intervention and positive behavior supports), bullying prevention, and school mental health. We appreciate the community of practitioners who shared their expertise, knowledge, and time to support the committee's goals.

As we look toward the future and the inevitable changes and challenges it will bring to school and early intervention settings, we encourage practitioners to make use of the tools and resources available through the SIS and AOTA. Take on a new challenge, reflect on your practice and consider how it aligns with the Centennial Vision (Clark & Bloom, ND) and the *Occupational Therapy Practice Framework: Domain and Process* (3rd ed.; AOTA, 2014), explore an emerging area of practice, develop a mentor/mentee

relationship, and connect with other professionals to address a common area of need.

We extend a warm welcome to the incoming committee and look forward to helping them to accomplish their goals.

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Evidence for Using Yoga

Interested in yoga programs to decrease maladaptive behaviors in children with autism spectrum disorder (ASD) or challenging behaviors? Based on a peer-reviewed article, the Critically Appraised Paper (CAP) at http://goo.gl/v5QHS0 provides an at-a-glance summary of how the classroom-based Get Ready to Learn (GRTL) yoga curriculum can positively impact classroom behaviors in children with ASD. For other CAPs and information on opportunities to submit or serve as a reviewer for a CAP, visit http://www.aota.org/Practice/Researchers/Evidence-Exchange.aspx

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