University of Nevada, Reno

The Influence of the Practice Setting in Pediatric Occupational Therapy

A thesis submitted in partial fulfillment
of the requirements for the degree of

Bachelor of Science in Community Health Sciences and the Honors Program

By

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Abstract

Pediatric occupational therapists aim to promote the quality of life and functional abilities of children (Bowyer & Cahill, 2010). Pediatric Occupational Therapy can be provided through both school-based and non-school based settings to children who require varying sorts of special attention. The school setting requires therapists to focus on academic tasks that require less intensive equipment than non-school based occupational therapy (State of Connecticut Department of Education, 1999). Non-school based pediatric occupational therapists, however, are not as easily accessible as school-based therapists and require out-of-pocket or insurance-based pay. Consequently, it was presumed that one practice setting may be more useful for some children while its counterpart may prove to be more successful for others. However, it is now believed that pediatric occupational therapy is most beneficial when the two settings collaborate with one another even though they may differ.

Acknowledgement

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Introduction

The purpose of occupational therapy is to provide patients with the ability to begin or return to a particular functional task or tasks (Ross, 2008). According to the World Federation of Occupational Therapists (2011), "occupational therapy is a client-centered health profession concerned with promoting health and well being through occupation." In this context, occupational therapy is often thought to assist adults in returning to work after they are injured or after they suffer a stroke or other debilitating experience. Pediatric occupational therapy on the other hand, focuses on child development ranging from the ability to play to academic performance (Bowyer & Cahill, 2010). Pediatric occupational therapy can be provided through both the school system and in non-school based settings; however, each setting allows for varying techniques, and each has substantially dissimilar equipment. This review will evaluate the strengths and weaknesses of each setting in order to determine whether one setting is superior to the other or if one setting can be more valuable to certain children.

This review will first examine school-based pediatric occupational therapy in which children are given occupational assistance during scheduled school time. Each therapy session is performed on a one-on-one basis with students or with an entire classroom. During one-on-one sessions, however, students may be pulled out of their classrooms and may potentially fall behind in their schoolwork. Pediatric occupational therapy provided within nonschool-based settings is conducted independently from the school system. Non-school based practice is generally scheduled on an individual basis and may include group therapy sessions. Group therapy involves the assistance of occupational, physical, and speech therapists who work in unison. Non-school based

pediatric occupational therapy practice may be more difficult to attain, however, due to the shortage of occupational therapists and increasing costs of therapy sessions (U.S. Bureau of Labor Statistics, 2010).

Occupational therapists, regardless of their practice settings, are licensed to practice after graduating from a master's or doctoral level program in occupational therapy and after passing the standardized National Board for Certification in Occupational Therapy. There is little research contrasting the many forms of therapy because the general consensus is that the practice setting does not have any effect on the methods used during a given therapy session. However, upon comparing the equipment and focal points used in each setting, it is apparent that the objectives and potential successes of each form of therapy may vary. This research is essential to the field of occupational therapy in that I will make a recommendation as to which setting is most beneficial to children with certain abilities and/or disabilities. A therapist should also then be able to determine the best option for his/her client to reach his/her potential. Therapists could also analyze the benefits of their settings and center therapy sessions around the most appropriate interventions and/or methods.

It is expected that occupational therapists practicing in non-school based settings have better access to equipment such as platform swings for children with strength and balance problems. However, this form of therapy is more difficult to obtain and is increasingly more expensive. Furthermore, it is hypothesized that non-school based occupational therapy is best for children with more severe physical disabilities such as muscular dystrophy and school-based practice may be best for children with disabilities that require less intensive services such as handwriting practice and feeding techniques.

Background/History

Occupational therapy was founded in 1917 by a group of males in the United States of America. However, the field didn't emerge until after World War II when injured soldiers were unable to return to their previously normal lives. Predominantly a male profession, occupational therapy later became one of the first fields that women emerged in as professionals (Peters, 2011). From 1950 to 1980 the profession expanded and took root in the medical world and is now considered primarily a female profession (Peters, 2011). In fact, in both 2001 and 2010, 90% of practicing occupational therapists were female while only 10% were male (Grant, Robinson, & Muir, 2004; Darden, 2010).

Myra McDaniel, formerly the head of occupational therapy history for the American Occupational Therapy Association, organized the historical archives of occupational therapy's foundation. McDaniel was later replaced by Robert K. Bing who continued the research in cataloguing the history of occupational therapy. The current Executive Board of the American Occupational Therapy oversees the practice today and provides useful information in comparing the techniques used by therapists in the past to those used today. For example, occupational therapists in 1917 were not using platform swings and adaptive yoga like many private practice therapists today. Instead, they were less technologically advanced and may have used techniques more similar to those used in the school-based system (Peters, 2011).

Pediatric occupational therapy is a form of therapy aimed at completing a particular functional goal for children less than eighteen (and in some cases, twenty-one) years of age (Evers, 2011). These goals can range from learning to feed after removal of a feeding tube to learning to walk with leg braces or even handwriting improvement.

Pediatric occupational therapy is provided to a wide range of children including both very high and very low physical, mental, emotional, and behavioral functioning (Bowyer & Cahill, 2010). The pediatric specialty within occupational therapy is on the rise composing roughly one-third of all certified occupational therapists (American Occupational Therapy Association, 1991).

Pediatric occupational therapy can be given in both non-school based practice settings such as therapy clinics and hospitals as well as through the school system. The non-school based setting is often scheduled during out of school time and requires no collaboration with the child's school. Pediatric occupational therapy provided during school hours is regularly provided in supplement to special education services. Occupational therapists working in the school system often attend to students in multiple schools (Evers, 2011). Therefore, school-based therapists require more travel time and generally have to transport documents and equipment from school to school. In turn, I presume that therapists working in the school system do not use intensive assistive technology and modifications to environment as often as pediatric occupational therapists working in the clinical setting.

On the other hand, pediatric occupational therapists employed in non-school based settings are in high demand, often having a very long waiting list in order for children to receive individualized care (U.S. Bureau of Labor Statistics, 2010). Consequently, occupational therapists employed in non-school based settings may not be as easily accessible. The costs of occupational therapy in non-school based settings can vary depending on the services provided; however, the average cost of a one-hour session is about one hundred dollars. These sessions can only be completed after an evaluation

has been conducted which averages at about two hundred dollars (Evers, 2011). Therefore, while occupational therapy in non-school based settings may involve better equipment, it also comes at a higher price and is not always accessible.

Licensure

In order to become a practicing occupational therapist, individuals are required to receive either a master's or doctoral degree from a program accredited by the American Occupational Therapy Association (State of Connecticut Department of Education, 1999). There are not separate programs for those who want to practice within the school system or those who want to work in a clinic or hospital for example. Furthermore, occupational therapy programs are not specialized. For example, occupational therapy students who want to specialize in geriatrics or hand therapy are not able to do so until after degree completion and the completion of continuing education certifications. Therefore, all occupational therapists are intended to have the same professional education regardless of the setting and population of which they intend to practice.

Additionally, students are required to pass and receive certification from the National Board for Certification in Occupational Therapy (State of Connecticut Department of Education, 1999). The Examination is standardized for all potential occupational therapists and does not differentiate between practice settings or prospective specialties. Furthermore, occupational therapists are required to receive licensure from the state they plan to practice in and keep their license and certifications current by updating their license every two years (State of Connecticut Department of Education, 1999).

School-Based Pediatric Occupational Therapy

Introduction to School-Based Pediatric Occupational Therapy

In 2007, 23% of practicing occupational therapists were employed within the school system (National Board for Certification in Occupational Therapy, 2008). While this value may seem small, this study conducted by the National Board for Certification in Occupational Therapy included all occupational therapists, not just those who specialize in pediatrics (National Board for Certification in Occupational Therapy, 2008). Consequently, 23% is essentially an underrepresentation of school-based therapists considering therapists working in geriatrics do not have the opportunity to work with their population of interest within the school district. The percentage of occupational therapists working with children is on the rise (American Occupational Therapy Association, 1991). This increase may be due in large part to the fact that occupational therapy services are required when deemed necessary to benefit a child's special education program (Individuals With Disabilities Education Act of 1990 [Public Law 101-476]). Thus legislation itself further advanced the field of pediatric occupational therapy within the school system. The Individuals With Disabilities Education Act of 1990 requires the use of occupational therapy when deemed necessary as follows:

> **§ 300.34 Related services.**
>
> (a) *General*. *Related services* means transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, and medical services for diagnostic or evaluation purposes. Related services also

> include school health services and school nurse services, social work services in schools, and parent counseling and training. [. . .]
>
> (6) *Occupational therapy* —
>
> (i) Means services provided by a qualified occupational therapist; and
>
> (ii) Includes—
>
> (A) Improving, developing, or restoring functions impaired or lost through illness, injury, or deprivation;
>
> (B) Improving ability to perform tasks for independent functioning if functions are impaired or lost; and
>
> (C) Preventing, through early intervention, initial or further impairment or loss of function (Individuals With Disabilities Education Act of 1990 [Public Law 101-476], Subpart A §300.34).

Receiving occupational therapy within the school system allows an occupational therapist to interact with a child's teachers and learning support assistants or LSAs (Birnbaum, 2010). LSAs act as classroom assistants and can be provided to children with special needs as documented in an Individualized Education Program or IEP (Haycock & Smith, 2011). LSAs assist children in a variety of activities from reiterating directions on an assignment to aiding in physical education games (Haycock & Smith, 2011). Therefore, if an occupational therapist working within the school system is able to form a positive relationship with a child's teacher and LSA, these professionals may then be able to incorporate occupational therapy practices within the classroom as well further improving the child's development (Haycock & Smith, 2011). As represented in Table 1, school-based occupational therapists can make recommendations for a student's teacher and other educational assistants in order to improve a child's productivity in general as opposed to solely during therapy sessions.

Table 1: Classroom Adaptations to be Considered for Common Related Service Referral Complaints (Dunn, 1991).	
Referral Complaint	**Possible Adaptations**
Poor lunch skills/behaviors	Provide a wheeled cart to carry lunch tray Provide large handled utensils Clamp lunch tray to table to avoid slipping Serve milk in sealed cup with straw
Poor toileting skills	Provide a smaller toilet Provide looser clothing Provide a setup stool for toilet/sink
Can't stay in seat; fidgety	Allow student to lie on floor to work Allow student to stand to work Provide lateral support to hips or trunk (e.g. rolled towels) Adjust seat to correct height for work Be sure feet are flat on floor when seated Provide more variety in seatwork
Clumsy in classroom/halls; gets lost in building	Move classroom furniture to edges of room Send student to new locations when halls are less crowded Provide visual cues in hall to mark locations Match student with partner for transitions
Can't get on or off bus independently	Allow student to back down stairs Provide additional smaller steps
Can't get jacket/coat on/off	Place in front of student, in same orientation each time Provide larger size for easier handling
Drops materials; can't manipulate books, etc.	Place tabs on book pages for turning Provide small containers for items Place all items for one task on a lunch tray
Poor attention, hyperactive, distractible	Decrease availability of distracting stimuli (e.g. visual or auditory) Provide touch cues only when student in prepared for it Touch student with firm pressure Provide frequent breaks in seatwork
Poor pencil/crayon use	Use triangle grip on pencil/crayon Use fatter writing utensil Provide larger sheets of paper Provide paper without lines Provide paper with wider-spaced lines
Poor cutting skills	Provide adapted scissors Provide stabilized paper (e.g. tape it down, use large clips, c-clamps)
Unable to complete seatwork successfully	Provide larger spaces for answers Give smaller amounts of work Put less items per page Give more time to complete task Change level of difficulty
Loses personal belongings; unorganized	Make a map showing where items belong Collect all belongings and hand them out at the beginning of each activity
Doesn't follow directions	Provide written or picture directions for reference Provide cassette tape of directions Allow student to watch a partner for cues

On the contrary, Vincent, Stewart, and Harrison (2008) reported that while teachers find occupational therapists helpful in working with children with special needs, teachers would prefer more interaction and experience with the therapists in order to reinforce occupational therapy practices and put them to use within the classroom.

As aforementioned, in order for a child to qualify for occupational therapy in the school system, he/she must show a significant deficit in their ability to perform academically. If a deficit is present and occupational therapy is believed to improve academic success, occupational therapy then becomes required as stated within an IEP, or Individualized Education Program (Children's Speech Therapy Center, n.d.). Therefore, a child can technically receive pediatric occupational therapy in a private setting while not qualifying for school-based therapy at all.

Occupational therapy provided in the school system can prove to be very different from private practice occupational therapy in many cases (State of Connecticut Department of Education, 1999). Therapists working within the school system strive to remove potential barriers to students' academic abilities to learn and achieve independence within the school itself (State of Connecticut Department of Education, 1999). Therefore, while school-based and non-school based therapy may overlap in some areas such as mobility and social skills, school-based therapists may place more emphasis on educationally driven activities such as handwriting while non-school based therapists may place more focus on play based activity (State of Connecticut Department of Education, 1999). In general, an occupational therapist's goal is to reduce or prevent impairment (State of Connecticut Department of Education, 1999). On the contrary, The Elementary and Secondary Education Act Amendments of 1966 state that occupational

therapy in the school strives to ensure a student's participation in education; therefore, school-based occupational therapists are federally required to provide services that will improve a student's educational process and only strive to reduce or prevent impairment when such impairment will increase the student's academic success (Blossom, Ford, & Cruse, 1996). In summary, school-based therapy follows an educational model of practice to enhance the child's educational performance through a team approach as opposed to a medical model that emphasizes mediation of a health problem (Sheare, 2003).

Setting/Equipment

School-based occupational therapy can be conducted in a variety of rooms within a school. For example, therapy sessions can be held in a classroom, a gymnasium, or special education classroom. For example, if a student is having difficulties moving between classrooms, therapy sessions are likely to be held in the hallways of the school. Therefore, the setting itself and equipment provided within the school-based therapy room can look very different from that of a private practice therapy clinic. As represented by Figure 1, school based therapists often do not have access to the large scale pieces of equipment that private practice occupational therapists may have; thus they may regularly be confined to therapy sessions held at the student's desk. On the other hand, more research may need to be conducted in order to assess whether school-based therapists even need large scale swings and trampolines since their duties are intended to focus solely on educationally based therapy practices.

Figure 1: An occupational therapist performs a handwriting activity at the student's desk (Utica College, 2011).

Non-School Based Pediatric Occupational Therapy

Introduction to Non-School Based Pediatric Occupational Therapy

In 2007, 58% of practicing occupational therapists, including those who did not solely work in pediatrics, were employed in a non-school based setting such as in a rehabilitation clinic or acute care facility (National Board for Certification in Occupational Therapy, 2008).

Unlike the school-based setting, occupational therapy provided in a non-school based setting allows parents and/or guardians to participate in the session with their child. Parents have the opportunity to observe the therapist working with their child and are even encouraged to partake in the provided exercises during therapy sessions (Birnbaum, 2010). Parents may then have the knowledge and skills necessary to complete the same or similar activities while at home. Therefore, if parents can employ the skills a child is working on during therapy sessions in the home, the child may master those skills at a faster rate than if they were not practicing the skills at home (Birnbaum, 2010). Furthermore, the occupational therapist may then find family members more easily accessible and can advise parents and/or guardians on alterations to the home environment to further improve the child's chances of success (Birnbaum, 2010). For example, an occupational therapist can recommend that a handrail and sit stool be installed in the shower to assist with a child's balance and avoid potential injuries.

Unlike school-based therapists, non-school based pediatric occupational therapists do not have to focus solely on techniques to improve a child's educational performance. Instead, non-school based pediatric occupational therapists follow a medical model which may potentially allow them to expand the practices used in a therapy sessions beyond

those used in school-based therapy (Sheare, 2003). For instance, in non-school based occupational therapy a child may be working to improve low muscle tone and increase his/her range of motion to improve mobility; however, if the decreased mobility does not appear to hinder the child's educational success, he/she would not qualify for school-based occupational therapy at all.

Setting/Equipment

Unlike school-based therapists, private practice therapists generally do not have to worry about transporting their equipment between locations. Therefore, non-school based therapists have the ability to use larger equipment such as suspension swings and rock climbing walls as demonstrated below in Figure 2 and Figure 3.

Figure 2: An Example of a Typical Non-School Based Occupational Therapy Room (Gayle, 2008).

Figure 3: An Example of a Typical Non-School Based Occupational Therapy Room (Blue Sky Therapeutics, 2009).

The equipment shown in Figures 2 and 3 represent pieces of equipment that school-based therapists generally would not have access to. It is not realistic to expect a school-based therapist to transport a trampoline, ball pit, or rock climbing wall between therapy sessions at multiple schools. The use of these apparatuses can improve a child's strength and balance by disguising exercises as playtime. Therefore, non-school based therapists essentially have access to a wider range of pieces of equipment. More equipment may then potentially lead to a wider range of activities that therapists employed in non-school based settings can work on with their clients.

Non-school based pediatric occupational therapists use a variety of swings that are attached to the ceiling of their clinics that most schools do not have the ability to use (Shapiro, 2008). Platform swings (see Figure 4), for instance, have the ability to stimulate a child's vestibular system allowing them to work on balance, spatial awareness, and core strength in a variety of positions (Shapiro, 2008). Platform swings have been a staple of

occupational therapy for many years allowing children to move through a variety of planes of motion and increasing body awareness (Shapiro, 2008). Platform swings also allow therapists to work on multiple skills at once. Figure 4 demonstrates how therapists can encourage children to improve their balance, special awareness, and core strength while sitting on a moving platform swing while also improving range of motion by reaching for certain objects on the floor. In turn, non-school based therapists may then be able to improve a child's abilities in a shorter time frame in that they have the ability to work on certain tasks then can be conducted while on a platform swing. While school-based therapists may have to work on the range of motion exercises on their own, non-school based therapists essentially have the opportunity to work on two exercises at once through the use of a platform swing.

Figure 4: A young girl and therapist work on motion and balance on a platform swing suspended from the ceiling of a therapy room (Autism Products, n.d.)

Non-school based therapists also have greater access to net swings then school-based therapists who would have to transport the swings between schools and classrooms

while drilling into the school's ceiling for support. As shown in Figure 5, net swings allow children to receive vestibular input by swinging through the air; however, net swings encompass the child's body which provides proprioception, or pressure to the joints (Shapiro, 2008). Similar to platform swings, net swings may potentially allow non-school based therapists to multitask their therapy sessions by requiring their clients to engage in another activity while in the net swing. While the net swing is providing vestibular input and proprioception, children also have the ability to work on the alphabet or count how many times they swing back and forth. In this sense, non-school based pediatric occupational therapists are not the opposite of school-based therapists. School-based therapists are required to focus on activities that are academically based but non-school based occupational therapists are not forced to only work on nonacademic practices (Children's Speech Therapy Center, n.d.). Therefore, non-school based therapists have the option to work on both academic and nonacademic practices at once with the use of a net swing, for example, whereas a school-based therapist would have to focus solely on the educationally driven activities (Children's Speech Therapy Center, n.d.). Thus platform and net swings may represent a large discrepancy between the uses of equipment in varying settings.

Figure 5: A young boy enjoys a ride in a net swing during a therapy session (Indoor Swing, 2012).

Similarities between the Practice Settings

Professional Commitment

Professional commitment is defined as a dedication to one's profession as well as the sharing of its practices and goals (Seruya & Hinojosa, 2010). Seruya and Hinojosa (2010) hypothesized that the practice setting for pediatric occupational therapists would influence their professional commitment; however, Seruya and Hinojosa's (2010) results demonstrated otherwise. Pediatric occupational therapists employed in both the school district and private practice settings were found to be extremely dedicated to their profession regardless of whether they were working alongside other therapists as often seen in private practice or in more of an isolate setting as demonstrated by the school system (Seruya & Hinojosa, 2010). Therefore, differences between the two major settings of occupational therapy cannot be directly related to the concept that one setting employs therapists who are more dedicated to their profession than its counterpart.

Differences between the Practice Settings

Organizational Commitment

Seruya and Hinojosa (2010) found that pediatric occupational therapists working in the private practice setting proved to have significantly higher organizational commitment than those employed in the school system. Organizational commitment is similar to professional commitment in that organizational commitment requires a shared set of beliefs and values related to the pediatric occupational therapy profession; however, the commitment is related to the organization itself as opposed to the profession (Shwu-Ru, 2008). Therefore, in the private practice sector of pediatric occupational therapy, the organization may be the clinic or hospital where the therapist is working. On the other hand, the organization related to therapists working in classrooms is the school district. After administering the Organizational Commitment Questionnaire (OCQ), Seruya and Hinojosa (2010) found that therapists working in the school district had little to no contact with other occupational therapists while those employed in private practice were in constant contact with other therapists. In turn, social identity theory, or one's self-concept of his/her membership in a particular group, is believed to be the major cause of discrepancy between the practice settings (Seruya & Hinojosa, 2010). Consequently, occupational therapists employed in the private practice or clinical setting may feel more included and influential in their organization than therapists employed in the school district (Seruya & Hinojosa, 2010).

Play-Based Therapy

Play can be described as the methods in which children interact with and learn from their environments (Yellend, 2011). Pediatric occupational therapists employed in a

variety of settings were found to use play as an assessment tool to determine a student's ability to partake in certain activities as well as part of a reward system (Knox, 1993). On the other hand, pediatric occupational therapists have conflicting views on play as a component of daily life requiring intervention itself (Couch, Dietz, & Kanny, 1998). Seventy-nine percent of therapists working in non-school based settings and 54% of therapists working in school-based settings reported assessing play when working in pediatrics (Couch, Dietz, & Kanny, 1998). This contrast implies that therapists view their roles differently based on the setting in which they are working. School-based settings focus on interventions from an educational standpoint, often working in collaboration with a student's teachers and specialists (Couch, Dietz, & Kanny, 1998). Therefore, if one team member does not value play as an essential part of intervention, it may be overlooked to focus on other tasks.

On the other hand, physician prescriptions and payment issues may conflict with pediatric occupational therapy practices most often occurring in non-school based settings (Couch, Dietz, & Kanny, 1998). Private practice occupational therapists who receive payment through insurance companies may be required to follow instructions based on contracts and a physician's prescription (Couch, Dietz, & Kanny, 1998). In turn, therapists employed in non-school based settings may be required by contracts and prescriptions to focus on activities not related to play behavior even though play is an essential part of a child's life (Couch, Dietz, & Kanny, 1998).

While play behaviors may not be present in all therapy sessions regardless of the practice setting, there is a significantly greater likelihood of assessing play behavior when the occupational therapist is employed in a non-school based setting (Couch, Dietz, &

Kanny, 1998). The conflict then arises as to how important play is a child's life. Occupational therapists and parents alike debate about whether play should be the focal point of therapy sessions or whether more educationally based tasks should be emphasized such as handwriting and social skills. On one hand, children spend a great deal of their time engaging in play activities which can further lead to skills used in adolescence and adulthood; on the other hand, children also attend school in order to further themselves academically and socially which is also essential to a successful adolescent and adult life.

For example, the activity of free play, defined as unstructured, imaginative play time, has shown to improve a child's social and language development, problem solving, and creative thinking, reduce stress and anxiety, improve resiliency and self regulation, and further the bond between parent and child (Whitman, Merluzzi, & White, 1999). In this sense, a child's ability to play can have just as important of an impact on a child's development as their attendance and participation in school. As a result, more research may need to be conducted in order to determine the impact of play in occupational therapy on child development.

Job Satisfaction

While all occupational therapists are in demand, school-based pediatric occupational therapists are in greater demand than non-school based therapists (Pawlisch, 1997). Hellickson, Knapp, and Ritter (1999) reviewed the reasons why school-based therapy may not seem as prestigious as non-school based therapy. Several explanations were discussed including stress, factors involved in accepting and staying at a job, and job satisfaction (Hellickson, Knapp, & Ritter, 1999). Bailey (1990) found that

approximately one-third of occupational therapists working with young children found their job to be depressing, mainly because of repetitive exposures to sad outcomes. Pediatric occupational therapists work with children who may be weak and/or suffering from major health issues which can take a toll on the therapist's mood as well. Therefore, Hellickson, Knapp, and Ritter (1999) hypothesized that job satisfaction for occupational therapists may be declining. After distributing a questionnaire to practicing occupational therapists, Hellickson, Knapp, and Ritter (1999) found that 95.4% of school-based therapists and 66.6% of non-school based therapists reported that they perceived their job satisfaction as good or better (Hellickson, Knapp, & Ritter, 1999). Table 2 summarizes how each setting ranked their own perception of job satisfaction. While non-school based therapists have more therapists who perceive their job satisfaction as excellent, non-school based settings have significantly fewer therapists who are in the upper two categories (excellent and good) as a combined value and more than six times the number of therapists who perceive their job as fair or poor than school-based therapists (Hellickson, Knapp, & Ritter, 1999). As a combined value, 31.5% of therapists in the non-school settings reported their job satisfaction as fair or poor compared with only 4.7% of school therapists (Hellickson, Knapp, & Ritter, 1999). In fact, not a single occupational therapist employed in the school system that was involved in the study rated their job satisfaction as poor (Hellickson, Knapp, & Ritter, 1999).

Table 2: Setting vs. Overall Job Satisfaction (Hellickson, Knapp, & Ritter, 1999).

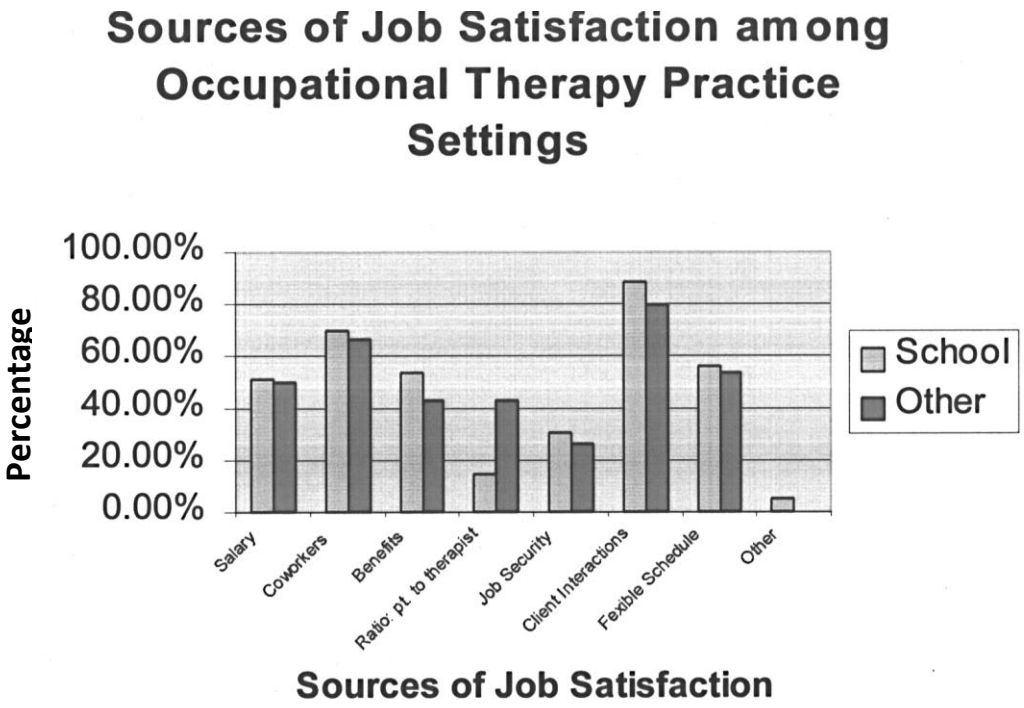
	Excellent	Good	Good-Fair	Fair	Poor
School	14.0%	81.4%	0.0%	4.7%	0.0%
Non-School	22.2%	44.4%	1.9%	25.9%	5.6%

As demonstrated in Figure 6, while each practice setting provided vastly different opinions on job satisfaction, therapists in both settings reported very similar sources of job satisfaction (Hellickson, Knapp, & Ritter, 1999). For instance, client interactions were reported as being the most satisfying source of being an occupational therapist (88.4% for school therapists and 79.6% for non-school therapists) followed by relationships with coworkers (69.8% for school therapists and 66.7% for non-school therapists) (Hellickson, Knapp, & Ritter, 1999). The greatest difference in perceived satisfaction between the two settings occurred in the patient to therapist ratio (Hellickson, Knapp, & Ritter, 1999). Approximately 42.6% of school-based therapists and 14% of non-school based therapists were pleased with their patient to therapist ratio (Hellickson, Knapp, & Ritter, 1999). While there is a significant different between these two values, it is important to recognize that less than half of therapists in both settings are pleased with the patient to therapist ratio, further demonstrating that pediatric occupational therapists are in great demand and feel as though they are overwhelmed with too many clients.

An interesting fact to point out, however, is that school-based therapists actually reported their interactions with their coworkers as being a greater source of job satisfaction than non-school based therapists (Hellickson, Knapp, & Ritter, 1999). This contradicts the views of Seruya and Hinojosa (2010) who found that school-based

therapists were not as organizationally committed to their professions as non-school based therapists which they hypothesized was due to the fact that therapists working within a school district do not feel as included and influential in their organizations. Seruya and Hinojosa (2010), however, conducted their research more recently. Therefore, there may have been a shift in the relationships between coworkers during the eleven year time frame between the organizational commitment study conducted by Seruya and Hinojosa (2010) and the sources of job satisfaction conducted by Hellickson, Knapp, and Ritter (1999).

Figure 6: Sources of Job Satisfaction among Occupational Therapy Practice Settings (Hellickson, Knapp, & Ritter, 1999).

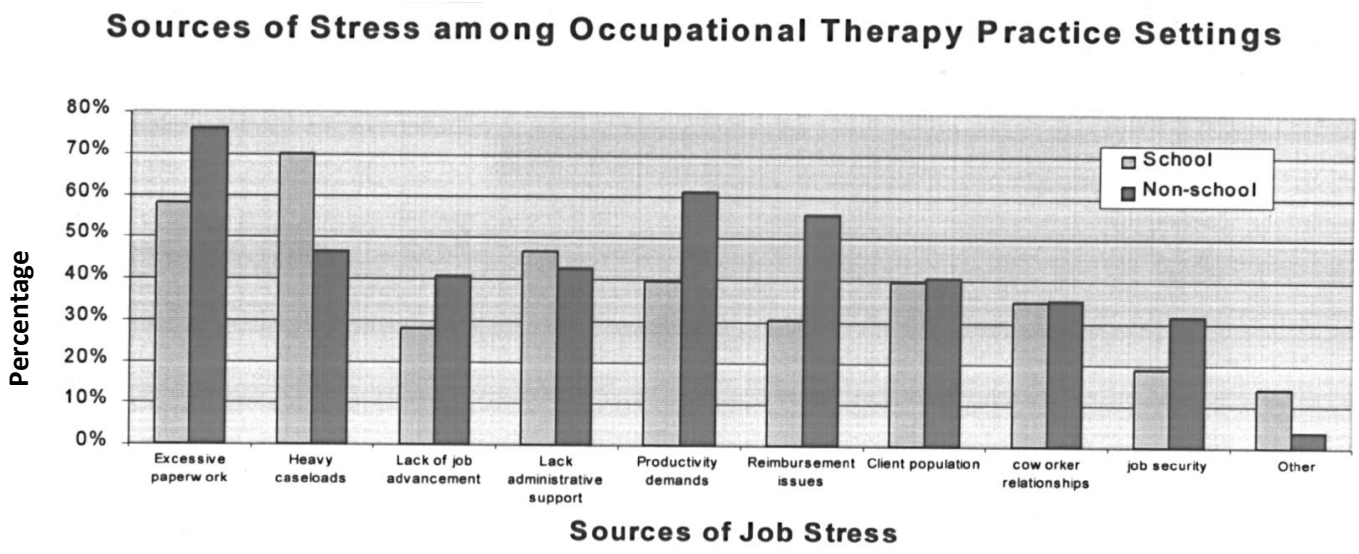


Hellickson, Knapp, and Ritter (1999) also found that the practice setting of pediatric occupational therapists influences the therapists' stress levels. As demonstrated

in Figure 7, school-based therapists reported their major stressors at work as being a heavy caseload (69.8%), excessive paperwork (58.1%), and lack of administrative support (46.5%) (Hellickson, Knapp, & Ritter, 1999). Non-school based therapists reported their greatest stressors as excessive paperwork (75.9%), productivity demands (61.1%), and reimbursement issues (55.6%) (Hellickson, Knapp, & Ritter, 1999). The most significant difference observed between the two settings is that non-school based therapists reported excessive paperwork, productivity demands, and reimbursement issues at a 20% higher level of stress in the workplace than therapists employed in the school system (Hellickson, Knapp, & Ritter, 1999). However, school-based therapists identified heavy caseloads as a job stressor at a 23.5% higher rate than non-school based therapists (Hellickson, Knapp, & Ritter, 1999). In fact, school-based therapists facilitate therapy sessions with eight to eleven clients per workday while private practice therapists report seeing an average of four to seven clients per workday (Hellickson, Knapp, & Ritter, 1999). Perhaps to counteract this inequity though, school-based therapists follow the academic calendar, having more than 80% of their employees working nine months out of the year and taking summers off while still being paid (Hellickson, Knapp, & Ritter, 1999). More than 96% of private practice therapists, however, reported working the entire twelve months out of the year (Hellickson, Knapp, & Ritter, 1999). Regardless of the length of the calendar year, however, a majority of therapists in both settings reported working between forty and forty-nine hours per week, generally taking weekends off (Hellickson, Knapp, & Ritter, 1999). Yet a significant difference between the work weeks of the two practice settings includes the fact that school-based therapists reported spending 20% of their time traveling between schools (Hellickson, Knapp, &

Ritter, 1999). Thus, while school-based therapists reported having a larger caseload than non-school based therapists, they also had to spend more of their time traveling (Hellickson, Knapp, & Ritter, 1999).

Figure 7: Sources of Stress among Occupational Therapy Practice Settings (Hellickson, Knapp, & Ritter, 1999).



Therefore, while Hellickson et al (1999) originally hypothesized that school-based pediatric occupational therapists would report having a lower sense of job satisfaction due to the fact that school-based therapists are in greater demand, they actually found the contrary to be true. School-based therapists reported having a greater job satisfaction even though they also report having higher caseloads and greater travel time than private practice therapists (Hellickson, Knapp, & Ritter, 1999). Furthermore, private practice therapists generally reported having stressors at work at a higher rate than school-based therapists (Hellickson, Knapp, & Ritter, 1999).

Conclusion

Pediatric occupational therapists vary in their practice settings and techniques used during therapy sessions. The practices used in each setting do not conflict with one another but can instead be used in collaboration. An occupational therapist in the school system can focus on handwriting and adaptive technology for the classroom that can improve a student's academic performance while a private practice therapist can focus on broader skills that may or may not relate to a child's educational goals. The collaboration between a private practice occupational therapist, school-based occupational therapist, and other team members involved in a child's life can improve progression in therapy and can help keep each member of the team on the same page, improving communication, and working in unison to similar goals.

Pediatric occupational therapists of all settings aim to improve a child's quality of life. School-based therapists, however, are required to focus on tasks that will benefit them academically whereas non-school based therapists can work on a wider range of tasks (State of Connecticut Department of Education, 1999). Furthermore, non-school based pediatric occupational therapists were found to use play-based therapy more often than therapists working in the school system (Couch, Dietz, & Kanny, 1998). On the contrary, occupational therapists were found to be very dedicated to their professions regardless of the practice settings they were employed in. Non-school based therapists, though, were found to be more dedicated to the organization they are employed in whether it be a hospital or private clinic than their school-based counterparts (Seruya & Hinojosa, 2010). Furthermore, discrepancies may exist between therapists' perceptions of job satisfaction (Hellickson, Knapp, & Ritter, 1999). Overall, pediatric occupational

therapists generally have good or excellent views of their job though more school-based therapists fall within this category potentially due to varying job stressors (Hellickson, Knapp, & Ritter, 1999).

Although it was originally hypothesized that one practice setting may be more beneficial than the other, it is now expected that each practice setting may be most successful when provided in unison. Rather than choosing one setting over another, a child's therapy sessions may be most advantageous when provided together in order to maximize time spent with an occupational therapist. Therefore, it is no longer logical to support one practice setting over another as originally anticipated. Instead, it is most rational to recommend that both therapy settings be fully enacted to complement one another when eligible.

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