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## SOCIAL SKILLS DEVELOPMENT: A PROGRAM FOR PEDIATRIC OCCUPATIONAL THERAPY GROUP SESSIONS

Kenadee Eyre

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SOCIAL SKILLS DEVELOPMENT: A PROGRAM FOR PEDIATRIC OCCUPATIONAL  
THERAPY GROUP SESSIONS

By

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A Scholarly Project

Submitted to the Graduate Faculty

of the

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In partial fulfillment of the requirements

for the degree of

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This scholarly project submitted by Kenadee Eyre in partial fulfillment of the requirement for the Degree of Occupational Therapy Doctorate from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

*Andrea Young*

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Dr. Andrea Young, OTD, OTR/L

4/14/2023

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Date

## PERMISSION

**Title:** Social Skills Development: A Program for Pediatric Occupational Therapy Group Sessions

**Department:** Occupational Therapy

**Degree:** Occupational Therapy Doctorate

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## **Abstract**

### **Purpose**

Children with a neurological disorder often demonstrate delays in social skills development (Glenn et al., 2020; Goldingay et al. 2020; & Tanta & Kuhaneck, 2020). This delay in development impacts their participation in meaningful occupations as optimal performance range includes an element of social interaction. The purpose of this product is to provide pediatric occupational therapists with the resources necessary to build social skills groups following a hierarchy of social skills development.

### **Methods**

An extensive literature review was completed to identify areas of need. Various online databases such as CINAHL and PubMed were searched and relevant articles were sifted through following certain inclusion and exclusion criteria. Impactful publications for this project included information on the effectiveness of social skills groups in children (DeRosier et al., 2011; Gilmore et al., 2022; Goldingay et al., 2020; O'Rourke et al., 2020; & Tanner et al., 2015), the impact of peers on social development in children (Fox et al., 2020; Glenn et al., 2020; Tanta & Kuhaneck, 2020; & Tillman & Prazak, 2018), and the impact of play on a child's social skills development (Ashori et al., 2018; Chester et al., 2019; Kuhaneck, 2020; & O'Keeffe et al., 2021). A combination of theories was used to guide the development of this project. The interconnection between the Ecology of Human Performance (EHP) Theory (Dunn, 1994), Cognitive Learning Theory (Piaget & Inhelder, 1969; Vygotsky, 1986), Social Learning Theory (Bandura, 1989), and the Polyvagal Theory (Porges, 2003) emphasizes the complicated



connection between the child, their tasks, and the context, while capturing the impact each can have on a child's overall performance range.

## **Results**

The product gives pediatric occupational therapists an outline for social skills group sessions that span eight weeks. This eight-session outline follows a progression of social skills development beginning with *self-awareness*. The outline moves into *self-regulation*, *emotional awareness*, *emotional regulation*, *recognizing others' emotions*, *body language*, and finishes with *basic social skills development* in sessions seven and eight.

## **Conclusion**

This product was created to give pediatric occupational therapists the resources and outline necessary for creating social skills group sessions. It is anticipated that this product will target the need for social skills development in children with a neurological disorder and will continue to grow and develop into a product that can be used to reach a bigger population.

## **Chapter I: Introduction**

### **Problem Statement**

Children with a neurological disability often demonstrate delays in social skills development (Fox et al., 2020; Gilmore et al., 2022). This delay impacts their ability to participate in social situations, leading to a decrease in occupational engagement. Occupational engagement is essential for sufficient health and overall wellbeing of a child's life. Being engaged in an occupation means a child performs occupational tasks as a result of personal choice and can find meaning in those tasks within a supportive context (American Occupational Therapy Association [AOTA], 2020). In support of occupational engagement, a combination of personal skills and factors are needed for a child to effectively find true meaning in occupations. Therefore, a delay in social skills can impact a child's ability to fully engage in meaningful occupations as many occupational activities involve social interaction. For a child, a delay in social skills can impact their friendships, participation in school, and identity development (Fox et al., 2020; Gilmore et al., 2022; Hilton & Kramer, 2020).

### **Purpose Statement**

Because of the impacts a delay in social skills can have on occupational engagement, it is important for occupational therapists to address social skills development to give children the supports and strategies they need to successfully engage in their meaningful occupations. This scholarly project gives practitioners a progressive outline for social skills development while creating social skills groups through eight different sessions. The purpose of this project is to fill the need for pediatric group therapy sessions addressing social skills. Developing social skills in a group setting allows children to implement what they are learning in a setting that involves

other people. Therapists can then intentionally assess and intervene while teaching strategies for coping and emotional regulation to further enhance social interactions for their clients.

### **Project Objectives**

This project is built to help develop social skills in children through a group setting while also sending resources home with caregivers for generalization and continuation of skills in the home and community. Groups are designed around a child's main occupation of play and incorporate a pedagogical learning style to best assist therapists in leading these groups. This project addresses social skills by building upon interoceptive cues, emotional regulation strategies, and by learning how to identify emotions in other children while interacting with peers.

### **Theoretical Framework**

The Ecology of Human Performance (EHP) framework assesses the interaction between the child, the context that child is in, and the tasks that child needs to complete. The dynamic interaction of these three concepts creates an overall picture of the child's performance range (Dunn et al., 1994). EHP understands the fluidity of the personal and the contextual variables as they are constantly changing based on new experiences. However, the factors of the child as well as the contextual factors influence what tasks a child chooses, the quality of those tasks, and the meaning the child derives from those tasks. Thus, while the child and the context are two separate variables, they act as a composite unit and cannot be separated (Dunn et al., 1994). This indicates that a change to one or the other has a direct impact on overall performance range.

Dunn et al. (1994) suggested the child brings a combination of skills, experiences, and interests all of which influence their choice in tasks. And, while the context is equally involved in task choice, it is important to remember that each child's contextual experience is unique

(Dunn, 1994). This indicates an importance for occupational therapists to understand the interconnection between a child's personal factors and the context they are influenced by.

In combination with EHP, Cognitive Learning Theory emphasizes the impact of context on a person and their tasks. Cognitive Learning Theory was designed to give children strategies to use when they begin to feel a shift in their emotions (O'Brien & Kuhaneck, 2020; Piaget & Inhelder, 1969; Vygotsky, 1986). An occupational therapist can help a child find strategies that work best for them by intentionally using guiding questions to determine how they are feeling, how they are performing their tasks, and what they might need to do to return to a state where they are ready to learn and interact with others. As children begin to learn strategies that help them regulate their emotional state, the occupational therapist can use guided questioning to generalize their strategies to other life situations (O'Brien & Kuhaneck, 2020). This leads children to become more self-aware and equips them with the strategies necessary to self-regulate when they find themselves in an overwhelming situation.

A child's ability to be self-aware is best explained by the Polyvagal Theory as it provides an explanation for the activation of the autonomic nervous system within the human body when a person is placed in a situation where they feel uncomfortable (Porges, 2003). The Polyvagal Theory analyzes the connection between the vagus nerve and the associated social engagement system, noting when both are optimally functioning, the autonomic nervous system (ANS) is able to support a person's health and growth. The ANS regulates the involuntary functions of the body that are necessary for survival (such as heart rate). When this system is in a state of defense, it is no longer able to support a person's state of health and growth (Porges, 2018). One's ability to understand how their ANS responds when placed in certain situations will develop the ability to better navigate their thoughts and feelings during interactions. Because of

this, the Polyvagal Theory has a direct tie to a child's context and how their personal factors interact with their contextual environment. When placed in a situation, do they feel safe? Are they able to regulate their emotions to interact with those around them? These interoceptive cues to how a child is feeling within their context can help determine how they respond. As children begin to regulate themselves, effective learning occurs through social interaction and collaboration with others.

Social Learning Theory indicates learning as a social process, one that is often influenced by role models (Braungart et al., 2020). Role modeling helps children learn social behaviors by being around others. Learning how to interact socially with others and through a combination of strategies, children can be successful in their tasks. Bandura (1989) stated that in the same context, those who have developed strategies to regulate their behavior will become more successful in their accomplishment of tasks than those who may not have such strategies (Bandura, 1971). While this may be true, those who are limited in their strategies can learn those strategies from those around them through role modeling. Therefore, occupational therapists can encourage social participation through a socially rich context by first establishing a therapeutic relationship with each child. This act of trust through a relationship between leader and child can be used to role model behavior between that child and others within the group.

The combination of theories creates an overall picture of the influence of internal and external stimuli that impacts a child's participation in social situations. For a child to successfully learn and interact in the context surrounding them, they must first understand the change in their emotional state by using interoceptive cues (Polyvagal Theory). Once they have been able to identify that there has been a shift in their emotions, they can evaluate the situation and use cognitive strategies to regulate their emotional state back to a place where they can

effectively communicate and interact with others (Cognitive Learning Theory). Often strategies can include altering or adapting/modifying their environment (EHP) by turning down lights, leaving the space, or finding ways to limit auditory stimuli. Once strategies have been applied and the child has returned to a state of homeostasis, social learning can begin and is often best completed by observing others (Social Learning Theory).

### **Key Terminology**

For ease of reading, definitions of the following are provided for each term commonly referred to throughout this project.

- *Social Participation* – participation in occupations that involve social interaction with others (AOTA, 2020; Gilmore et al., 2022; Hilton & Kramer, 2020).
- *Social Skills* – refer to specific behaviors that people use to communicate, learn, build heavy relationships, and meet their needs in appropriate ways (Fox et al., 2020; Gilmore et al., 2020).
- *Social Cognition* – one’s ability to process and apply information about social situations and those involved in social interactions (Gao et al., 2019).
- *Interoception* – one’s perception of the internal feelings within their body (Gao et al. 2019).

### **Conclusion**

Children are in a continual state of growth and are influenced by internal and external stimuli that impact the plasticity of their brains by constantly engaging them in new experiences. How they respond to these new experiences influences the reactions they begin to associate with the different stimuli, whether positive or negative. Children who have a difficult time interpreting interoceptive cues from these different stimuli, may respond inappropriately in social

situations. Because of this, it is important for pediatric therapists to address social skills development through a progressive fashion. This project provides therapists with an outline of social skills progression to guide the development of social skills of children through a group setting while also providing take-home material for the generalization of skills to other environments.

## Chapter II – Literature Review

### Overview of Terms

Social interaction is an essential part of life through building relationships or involvement in the community. Communication happens every day in every context and has an influence on overall occupational performance. The ability to communicate effectively can impact a person's participation in meaningful occupations which leads to an impact on overall health and well-being. Children rely on communication to express wants and needs and progress through social milestones as they grow. Social milestones start from a very young age, and around the age of three years, children start to play and interact with others around them (Center for Disease Control and Prevention [CDC], 2022c). Children with a neurological disorder often have a deficit in social skills, impacting their sense of social belonging.

*Social participation* refers to the interweaving of occupations that involve social interaction with others (AOTA, 2020; Hilton & Kramer, 2020) which includes the ability to communicate positively and effectively with peers, family, friends, and community members. Children with neurological disorders often have difficulty with social participation, impacting their ability to effectively communicate with those around them. Social participation is necessary for building relationships and the utilization of social skills. *Social skills* are specific behaviors people use to communicate, learn, get needs met in appropriate ways, and build healthy relationships (Fox et al., 2020; Gilmore et al., 2020). For children, social skills include the ability to build relationships such as a friendship and resolve conflicts through apologizing, learning to share with others, and listening to others (Tillman & Prazak, 2018). There are many other skills involved in socialization and communication, and a deficit in any of those skills can have an impact on the effectiveness of building a relationship with people.



## **Person Factors**

### ***Social Participation and the Impact of Person Factors***

Client factors have an impact on a child's ability to participate in social situations, and children with neurological disorders are at risk for delayed development in social skills. Neurological disabilities such as autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) are prevalent in childhood, and children with such diagnoses often face challenges in social participation due to factors commonly associated with these diagnoses. In 2018, the Center for Disease Control and Prevention (2022b) reported 1 in 44 children were diagnosed with ASD in the United States. In 2019, the CDC (2022a) reported 9.8% of children between the ages of 3-17 in the United States were diagnosed with ADHD. Along with that, 6.8% of children show signs of a TBI and 3.9% received an actual diagnosis (Black & Zablotsky, 2021). Janssens et al. (2015) reported the most common neurodisability diagnoses were cerebral palsy (CP), ADHD, ASD, and TBI. While these statistics pertain to a small number of children who have been diagnosed with a neurological disorder within the past four years, many children and youth have varying disabilities and experience difficulties with social participation because of it.

Higher level cognition has an impact on how children with a neurological disorder interact in social situations. Tuerk et al. (2019), showed brain differences in children's social brain network (SBN) following a TBI. They noted impairments in socio-cognition following a TBI and contributed it to more general social dysfunction such as the inability to recognize affect and poorer response inhibition. This inability to regulate responses when talking with peers can impact the relationship they might have with those peers as it is harder for them to interpret what is happening during a social situation. Not only that, but a TBI can impact a child's ability to

appropriately respond to social cues or may lead them to respond inappropriately in social situations (Tuerk et al., 2019).

Children with sensory processing difficulties, as seen mostly in children with neurological disorders, often show higher deficits in social skills and social participation. Sensory processing disorder makes it difficult for children to regulate their response to sensory stimuli from touch (tactile), taste, smells, sounds (auditory), and sight. Sensory processing difficulties lead to avoidant behaviors, impacting their ability and willingness to engage in occupations with such sensory stimuli. Children with a neurological disability can present with mostly underresponsiveness or sensory-seeking behaviors impacting their ability to notice what is happening around them. These behaviors paired with deficits in social skills development result in a lack of motivation to engage in social situations. Motivation to participate in social interactions is impacted by auditory-filtering, tactile sensibility, and visual processing (Kojovic et al., 2019). Therefore, a child's ability to process or adapt to sensory information directly impacts their motivation to engage in social situations.

### ***Social Participation and Identity Development***

Identity development starts from a young age and becomes more important during adolescence. Social participation allows children to define who they are, what they value, and where they want to go in life (Hilton & Kramer, 2020). This development in identity includes the knowledge and identification of who they are as an individual with a disability. Knowing this can help them learn how to connect with others who have similar challenges. Hilton and Kramer (2020) also noted two important themes to identity development including trying new things and learning your limits. Participation in new activities allows children to further develop their

interests and disinterests, expanding their occupational engagement. This knowledge about what activities are meaningful to them can help them connect with others who have similar interests.

Friendships are formed through socially connecting with others who have similar interests. Therefore, children with a disability can connect with others with similar disabilities to help gain a positive self-identity through valuing aspects of their disability (Hilton & Kramer, 2020). Hanebrink and Jedlicka (2022) stated, “disability is an identity and part of diversity... identity belongs to the individual” (p.11) and a connection with others with similar challenges can help children create positive feelings about their disability. These types of friendships and identity development can be difficult to form for a child who has a neurological disability resulting in delayed social skills.

### ***Social Interaction and Social Skills***

A *social interaction* is, “the reciprocal exchange of information as well as relational components including relationships and friendships, acceptance and belonging, and isolation and loneliness” (O’Keeffe et al., 2021). The effectiveness of this exchange of information is determined by a child’s ability to utilize social skills including cooperation, listening, self-control, recognizing social cues, initiating, and terminating conversations (AOTA, 2020; Ashori & Yazdanipour, 2018). Children begin communicating from a very young age and the ability to communicate continues throughout life.

Children with a neurological disorder can often have a difficult time interacting with peers due to deficits in social skills. Because of this, there is an impact in their social participation and can often lead to peer rejection. Friendships can be difficult to form because of impulsive, aggressive, or avoidant behaviors as seen in many children with a neurological disorder. In a study by Glenn et al. (2020), researchers examined children with ADHD over the

course of six years studying the correlation between childhood aggression, social skills development, and peer rejection. Their findings showed that even with aggressive behaviors, those children who had higher levels of social skills were more likely to form friendships with peers than those with lower social skills levels which often led to peer rejection. Positive social interactions are foundational to children's learning and the development of relationships (Tanta & Kuhaneck, 2020).

Tanner et al. (2015) conducted a systematic review in which they found group-based social skills interventions increased social skills, positive interactions, and less solitary play. Group interventions allow therapists to provide services to children to target social learning through opportunities to engage with peers who have similar goals. The connections made between peers with similar disabilities have been shown to have improvements on social development with help from a program designed to meet specific social skills needs (DeRosier et al., 2011). This is due to children being able to see other children working through their difficulties while also providing an outlet to express their feelings and help build up a positive identity.

### ***Processing Skills and Communication***

Engaging in social situations requires the ability to understand cues and process what is happening. Social cognition and social skills develop throughout childhood and generally increase with age. Executive function skills such as the ability to integrate feedback, react flexibly to change, respect turn-taking, and avoid negative reactions are critical to successful communication (Tuerk, 2020). Understanding communication through non-verbal cues such as gestures, facial expressions, body language, or eye contact is critical to responding appropriately. Appropriate responses set a foundation for establishing positive peer relationships.

Along with the ability to respond appropriately in situations, communication requires the ability to be self-aware of areas of communication deficits. There is an issue with poor self-awareness in children with neurological disorders and because of this, occupational therapists must educate and raise awareness to these deficits early on (O'Rourke, 2020). Collaborative goal-planning helps address these difficulties. As an example of this, children with CP may show impairments in expressive and receptive language skills resulting in a difficult time processing language-based information. Self-awareness combined with collaborative goal planning can have an impact on the child's participation in activities with peers and their understanding of conversations or directions (Reidy et al., 2020).

### ***Play and Social Skills Development***

Play is one of the main occupations in which children engage. Through play, children learn skills such as motor development, problem-solving skills, and how to interact with their peers. Children with a neurological disorder, such as those with ASD, often lack the motivation and the skills required to successfully engage in, initiate, or maintain social play (Chester et al., 2019). Play provides a way for children to build skills such as taking turns, collaboration, initiation, understanding body language, and maintaining attention – all of which are needed for a positive social interaction with others. O'Keeffe et al. (2021), states, “play provides a natural context for the development of social relationships and is a natural means of making friends” (pp. 2-3). Group play therapy has been shown to improve behaviors such as social skills and provides a means for children to communicate their thoughts and emotions (Ashori et al., 2018). Therefore, through play, children can find a natural way to build social skills and social relationships.

There are many different occupational therapy interventions that can be utilized for social skills development. Goldingay et al., (2020), studied the differences between cognitive-behavioral therapy (CBT) and age-appropriate play-based intervention groups for adolescents. They found that CBT interventions made participants more aware of how socially engaged they were. Those participants in the play-based social skills group showed higher outcomes in narrative ability, or the ability to understand others and social contexts through flexible thinking (Goldingay et al., 2020). Kuhaneck (2020) noted that children with ASD generally have a difficult time with flexible thinking and novel ideas. Therefore interventions to address those deficits can help children navigate social situations.

### ***Social Interaction and Interoception***

Knowing interoceptive cues can help a child engage in social situations. Interoception is one's ability to identify feelings from their bodies as they relate to well-being or mood (Craig, 2002). Therefore, interoception has a direct impact on a child's social interactions. As Arnold et al. (2019) suggested, a child who can focus on their internal feelings and can accurately translate those feelings to social situations may improve their social connections and decrease loneliness. Thus, helping a child understand their interoceptive cues can boost their social skills development. If a child can accurately understand their feelings when in a social situation and use the proper strategies to return to a homeostatic state, they will begin to develop the skills they need for meaningful social interactions. Along with what was stated by Arnold et al. (2019), Gao et al., (2019) suggested that understanding one's interoceptive cues can improve social cognition. Because children are in a constant state of development, their social cognition is moldable, making it important to integrate interoception into social skills development to help children recognize their internal state before acting in a situation.

## **Contextual Factors**

### ***Physical Context***

The physical context impacts a child's social development and can either support or inhibit their social participation. Children with sensory processing difficulties are less likely to participate in social gatherings in the community based on their ability to regulate sensory input. The ability to regulate sensory input often comes through adaptations to the physical context allowing a child the ability to participate. Inclusion in natural context succeeds when specific supports and accommodations are provided (Kuhaneck & Case-Smith, 2020). These contextual modifications contribute to a child's functioning by reducing barriers ultimately increasing participation in social activities. Children participating in group therapy sessions potentially meet in an outpatient setting or within the community. The job of the occupational therapist is to remove barriers to participation by helping children regulate overwhelming sensory input from lighting, sounds, or other distractions. Regulating sensory input helps children focus on communicating with others without having to contend with the overwhelming feelings of the context that surrounds them.

### ***Social Context***

Social skills are among some of the first skills a child develops. Because of this, a child's social context has an impact on their social skills development. In the early months of life, a baby interacts with parents or caretakers to communicate wants and needs (CDC, 2022c). As a child begins to grow, their communication starts to become directed toward those outside of their familiar circle. Peer interaction begins around the age of three when children voluntarily play with other children. In a preschool or school setting, children are surrounded by peers and teachers who impact their social participation. Supports from family and friends impact a child's

ability to form relationships. These relationships become a support or a barrier to participation in meaningful activities (Anaby et al., 2015).

Supports from a child's social context increases greater social inclusion. However, Kuhaneck (2020) described social inclusions and participation as more than just friendships and having a job, as full participation includes involvement in desired community activities. Therefore, supports for social inclusion need to be seen throughout the community to help encourage full social participation in children with neurological disorders. Social aspects of the environment influence how children and adolescents experience participation including attitudes and beliefs surrounding their ability to successfully participate (Hilton & Kramer, 2020).

### ***Cultural Context***

A child's social participation and social interactions are shaped by their cultural context. Culture has an impact on a family's engagement in occupations which ultimately impacts a child's occupations as they are embedded in their families/communities' cultural practices (Kuhaneck & Case-Smith, 2020). For that reason, a child's social engagement depends on their cultural norms. Occupational therapists can have a difficult time creating a program for cultures with varying norms (Tillman & Prazak, 2018). Yet careful consideration to culture can support engagement in social contexts.

Involvement in cultural organizations may also contribute to a child identity development (Hilton & Kramer, 2020). The cultural of a child's family differs from the culture surrounding a child's disability. A child and their family may choose to become a part of a group of families experiencing life through a similar disability. Engagement in cultural organizations can lead to positive identification with aspects of a disability, and a child can counteract the negative attitudes or beliefs of others unfamiliar with a child's abilities.



### ***Temporal Context***

Development of social skills follows a progression from infancy to young adulthood and the stage of development a child is in impacts the tasks they perform. The first year of life holds many important developmental milestones in social skills progression. By four months, infants are participating in social play and begin interacting with other people (CDC, 2022c; Myott et al., 2016). Between 7 months – 11 months, babies are beginning to engage in imitative play and enjoy repetitive tasks (CDC, 2022c; Myott et al., 2016). Children begin to become more aware of the people around them and begin to fear unknown people around the age of 1 year, 3 months (CDC, 2022c; Myott et al., 2016). Taking turns begins around 4 years (CDC, 2022c; Myott et al., 2016). Full cooperative play, such as playing by the rules in groups, happens in 5 to 6 years (CDC, 2022c; Myott et al., 2016). The temporal context influences a child's role in their environment, impacting their participation in tasks based off the meaning they extract from each.

### **Task**

Social participation significantly contributes to the development of social skills necessary for daily occupations at home, school, or in the community. O'Rourke et al. (2020) and Levasseur et al. (2010) suggested a 6-level taxonomy of social activities to help teach children how to connect with others with levels 1-6 indicating social participation and levels 5-6 indicating social engagement, which will be discussed in more detail further in the paper. Such a hierarchy articulates the need for engagement in tasks responsible for role development through social participation. This taxonomy demonstrates a necessary flow when preparing for social interactions. Yet it also follows a progression of skill development seen in typically developing children and increasing overall performance range with each task level ultimately reaching the goal of complete social engagement.

### ***Level 1 – Preparing to Meet Others***

Levasseur et al. (2010) referred to this level as the preparation one does before social interactions. In preparation to meet someone else, a child must be self-aware and understand their interoceptive cues when placed in a situation where social interaction is necessary. As an infant, a baby's social participation is based around what they want or need, and their interaction is reactive to what is happening around them. For example, a baby might calm when they are talked to or react when their caregiver leaves (CDC, 2022c). Therefore, very little preparation is needed as all social interaction is initiated by another person. As a baby grows into childhood, their self-awareness increases and their interactions with others becomes self-guided. However, children with a neurological disorder often have a difficult time identifying their interoceptive cues and will need to understand those cues before they interact with others. Thus, preparation to meet others means children need to first understand themselves. This preparation will eventually lead to them regulating their internal feelings.

### ***Level 2 – Knowing Others are Around***

Levasseur et al. (2010) explains level two as walking around the neighborhood, knowing there are people around but not fully interacting with them. To connect that with the development of children between ages one year to around three years, it is known that they start to play more independently; however they understand that there are others around (CDC, 2022c). Their interactions might happen unintentionally and engagement during those interactions is almost nonexistent. During stage two, it is important to help children understand that there are others around them, and lightly expose them to interactions through common interests. This task exposes children to others by allowing for self-initiation of engagement and for space these children need to understand their emotions when around other people. Stage two will be more

successful when a child is able to regulate their interoceptive cues. Therefore, self-regulation and emotional regulation is an important skill for children to have during this stage.

### ***Level 3 – Light Interactions with Others Around***

Around the age of three years, children begin to interact with peers more and will engage in play with them or they may even initiate play with each other (CDC, 2022c). In this level, there is a brief interaction between the children; however they are starting to become more aware and more comfortable when interacting with those around them. Level three requires initiation of interactions as well as continuation of the task for successful engagement. Children with delayed social skills may struggle with one or both of those skills resulting in a lack of participation in meaningful tasks. Level three builds upon the previous levels by integrating emotional recognition in others. This allows children the chance to understand that others have emotions too by learning to identify how emotions look for their peers.

### ***Level 4 – Working Collaboratively with Others***

School activities incorporate collaboration once children have learned how to effectively communicate with those around them and they have started to form relationships. Level four shows others interacting to reach a common goal (Levasseur et al., 2010). These interactions are observed during group projects at school or organized games at recess. Collaboration with others requires a child to effectively self-regulate their bodies and their emotions as well as know and recognize the correct body language to use when talking to another. For example, the Occupational Therapy Practice Framework notes one's ability to turn their body toward the person they are interacting with, look at the person they are speaking to, and place their body an appropriate distance from the person they are interacting with (AOTA, 2020). Appropriate body language and self-regulation will allow children to work together effectively.

### ***Level 5 – Learning to Help Others***

By level five, one's identity begins to develop. Children have mastered collaborative activities and can start to care for others around them (Levasseur et al., 2010). Around the age of four, children like to be the “helper” and this need to help others continues through all other social interactions (CDC, 2022c). Level five would be considered more for adolescents and adults as they begin learning who they are and where they want to go in the world. Their role of helping others becomes more prominent as they become more aware of their own identity within their context.

### ***Level 6 – True Community Integration***

Social engagement tasks at the sixth level are seen as a way to give back to the community in a way that affects many people (Levasseur et al., 2010). This level requires a conscious effort to place oneself in the community to give back. Therefore, contributing back to society might not be seen in childhood as much as in young adulthood or adulthood. This level requires children to master all the previous task levels before they are able to reach level six in their adult lives.

### **Performance Range**

Interacting with others throughout one's life contributes to occupational balance. Sparsity in relationships and friendships leads to higher levels of social isolation and loneliness. Unfortunately, a neurological disability leads to such occupational deprivation through a combination of developmental difficulties and contextual barriers. To counter this, social participation is vital to reducing loneliness, exclusion, and victimization (O'Rourke et al., 2020). An interaction between a child's learned performance skills and adaptations to their context

supports engagement in social interactions ultimately providing a positive impact on their overall performance range.

### **Statement of Need**

Social participation leads to engagement in occupations improving overall health and well-being. In their early years, children rely on social interactions through play and engagement with peers. These interactions require adequate social skills to meet the need of self-efficacy through a child's ability to effectively communicate their wants and needs to those around them. Learning social skills from an early age can impact a child's ability to build relationships as they progress through life as well as their ability to secure a job and perform vocational duties later in life. A group program targeting social skills development for children with neurological disabilities is needed to help children engage in their community, leading to improved performance range and an increase in overall quality of life.

### **Occupational Therapy's Role in Program Development**

Occupational therapists evaluate the dynamic connections between the person, the context, and the task as it relates to performance range. Because of their ability to analyze tasks and adapt or modify the environment, an occupational therapist is a critical part of the program development team as they assist in improving the lives of clients through an occupational lens. Social skills development can negatively impact social connections with others and for a child, making connections at an early age improves occupational performance by limiting isolation and loneliness. An occupational therapist can evaluate the situation, decide what tasks would appropriately address needed areas, and work with their client to remove barriers to social skills development.

### **Chapter III – Methodology**

The development of this social skills program began with a needs assessment. The purpose of this needs assessment was to better explore the impacts of social skills on performance range and to address the need for a social skills group program for a pediatric outpatient clinic. Due to the need of a social skills group program, the purpose of this scholarly project is to create a resource for therapists to utilize in group therapy sessions, targeting the development of social skills for the children they serve.

Following the needs assessment, an extensive review of the literature was conducted to find the best evidence-based resources available to integrate into this product. Resources such as online databases, published books, professional organizations, and government websites were reviewed and used. Online databases included CINAHL, PubMed, and Google Scholar. Articles fitting key words and phrases were reviewed and many resources were fit to incorporate. Resources came from a combination of occupational therapy specific articles as well as resources from other health professions. All of the resources included were an integral part of the creation of this project. However, key publications to this project included research in the effectiveness of social skills groups (DeRosier et al., 2011; Gilmore et al., 2022; Goldingay et al., 2020; O'Rourke et al., 2020; & Tanner et al., 2015), the impact of peers on social skills development (Fox et al., 2020; Glenn et al., 2020; Tanta & Kuhaneck, 2020; & Tillman & Prazak, 2018), and play's impact on social skills development (Ashori et al., 2018; Chester et al., 2019; Kuhaneck, 2020; & O'Keeffe et al., 2021).

Key words and phrases included, “social skills,” “group therapy,” “play therapy,” and “pediatrics.” Inclusion criteria included peer reviewed articles. Articles not written in English and articles published after 2010 were excluded. Other original article pieces were used for

theory and frames of reference. Personal communication with experts such as Stephanie Suedel, MOTR/L, a clinician and business owner; and Devon Olson, MLIS, a research and education librarian, have helped to build a statement of need and ethically guide this project.

Following a pedagogical learning style, this project was created in a way that enhances learning and understanding for the project's intended audience. Specific care was given to the simplicity of the terminology and explanations used throughout this project. Children at the kindergarten level through early middle school are beginning to develop a natural curiosity for themselves and the context around them (Bastable et al., 2020). It was important to let the children feel they have some control over their sessions as Bandura et al. (1996) stated, "children who believe they can exercise some control over their own learning achieve success" (p. 1217). Therefore, sessions throughout this program were designed to use guided questioning to help children discover answers for themselves. Along with a pedagogical learning style, the goals and objectives for this project were created using *Bloom's Taxonomy*. The cognitive, affective, and psychomotor domains (Bastable & Rabbia, 2020) guided the creation of the goals and objectives for this product. The goals and objectives were included throughout the project to ensure practitioners understood the purpose of the sessions within this project.

To further assist the development of this product, an occupation-based model was carefully chosen to better create this product through a theoretical lens. The model chosen to guide the creation of this product was the Ecology of Human Performance (EHP) model. EHP assesses the interaction between the person, their environment, and the task they are completing (Dunn et al., 1994). The person factors are comprised of a combination of cognitive, sensorimotor, and psychosocial skills as well as experiences and personal interests. The context can be classified as temporal, physical, social, or cultural and provide both supports and barriers

to a person's performance range. EHP ultimately strives to improve the person's performance range by increasing the number of tasks the person can perform through establishing/restoring skills and adapting/modifying/altering the environment. EHP's role in this project was to assess the dynamic interaction between the personal skills of a child struggling with social skills development, and how the context supports or inhibits their social participation tasks.

Paired with EHP was Social Learning Theory, the Polyvagal Theory, and the Cognitive Learning Theory. The Polyvagal Theory explains the nerve response to external environmental stimuli and how that can impact a person's ability to experience a positive social interaction (Proges, 2003; Ryland et al., 2021). Cognitive Theory is designed to help a child increase their use of strategies (O'Brien & Kuhaneck, 2020). And Social Learning Theory is used to assist children in learning social behaviors through observation of others and role modeling (Hilton & Kramer, 2020). Therefore, by understanding how the nervous system reacts to external and internal stimuli (Polyvagal Theory), a child can incorporate strategies to help them regulate their emotions (Cognitive Theory) such as adapting or modifying the environment (EHP). Regulated emotions can help children connect with others around them as they learn important social skills (Social Learning Theory).



## Chapter IV – Product Description

### Product Overview

This product includes an outline for a social skills group for children in kindergarten through the early middle school years. The outline assists with social skills development in children through a progressive, eight-session group. Each session within this group program progresses through a hierarchical pyramid of social skills development influenced by a variety of credible sources (Suedel, n.d.; Levasseur et al., 2010). Session 1 focuses on *self-insight*; Session 2, *self-regulation*; Session 3, *emotional identification*; Session 4, *emotional regulation*; Session 5, *emotional identification of others*; Session 6, *body language*; Sessions 7 and 8, *basic social skills*.

This product begins with an overview of the purpose of this resource book as a way for therapists to structure social skills groups for children. The structure follows a hierarchy of social development and other leader considerations when presenting information to the group. Social skills groups are important for social skills development in children with a neurological disability as it allows for children to safely practice social engagement with peers through the guidance of a group therapist.

Session 1 focuses on self-insight in children by bringing awareness to their internal selves and how they feel in the context that surrounds them. Session 1 integrates interoceptive cues by intentionally bringing awareness to how the children's bodies feel when they are completing an activity quick versus slow or when using big movements versus small movements. Intentionally helping a child bring awareness to how their body is feeling in different situations can lead to them independently recognizing the signs of an unregulated body.

Session 2 adds to self-awareness by integrating the concept of self-regulation. Session 2 provides a way for children to understand different strategies to help them regulate their bodies when they begin to feel unregulated, which may impact their occupational performance. Once a child is able to understand their interoceptive cues, as taught in Session 1, they can begin to implement strategies to regulate those cues.

Session 3 incorporates the recognition of emotions and how emotions might feel in oneself. By being able to identify emotions and understand how emotions can feel, children can begin to understand what situations might make their emotions change. A child's emotional knowledge, or their ability to identify their emotions and the causes of their emotions (Ornaghi et al., 2019), can impact their reactions in certain social situations. It is important to help a child recognize their emotions and understand what is making them feel the emotions they are feeling.

Session 4 builds in emotional regulation to help children understand how to regulate the emotions they feel. "Children give meaning to their own emotional experiences and learn strategies for regulating their emotional states on the basis of responses from people and environmental conditions and resources" (Olson, 2019, p. 307). Because of this, it is important to teach children strategies to regulate their emotions because different situations can bring out different emotions in each child. Therefore, if children are given strategies to regulate their emotions, they can begin to generalize them when necessary.

Session 5 intentionally brings the children's awareness to those around them by identifying that others have emotions too. Olson (2019) stated, "through reciprocal interaction of emotional regulation with others, children gradually learn how to regulate their own emotions and how to regulate the emotions of others in social interactions" (p. 307). This quote also shows the importance of exploring and teaching emotional regulation strategies in a group setting as the

exposure to other's emotions can help a child better understand their own emotional regulation strategies.

Session 6 begins to add in basic social skills by addressing appropriate body language when interacting with others. It is important for a child to understand which non-verbal cues are acceptable to use when interacting with other people as well as learn to read other people's non-verbal cues while interacting with each other. Non-verbal communication impacts a child's ability to engage with those around them.

Sessions 7 and 8 incorporates each concept learned throughout previous sessions for full interaction with group members. Learning to incorporate all the social skills the children have learned during the past sessions is important for full social involvement. In a group setting and through the guidance of an occupational therapist, children can safely explore and be guided through their social skills development.

Each session is equipped with a take-home sheet for therapists to provide to the parent or caregiver of each child. The take-home sheets provided caregivers with further information about what the child learned in each session and terminology or resources to use to help the child at home. This product also provides sustainability resources including ways to complete pre-evaluations and post-evaluations to ensure the program is completing the goals it was designed to complete. The evaluation for this product will be completed by both parents and group leaders to assess pre-group social skills and will be completed again following the group to assess the children's social skills after they have completed the group.

The development of this program was guided by the Ecology of Human Performance (EHP) model. EHP lead the overall occupational value of this product. In addition to EHP, the content within the program was completed using Social Learning Theory, Polyvagal Theory, and

Cognitive Learning Theory to build sessions structured around teaching and learning in appropriate ways following the social skills progression outlined in the pyramid.

## Chapter 5: Summary

The purpose of this project was to create social skills group sessions for pediatric occupational therapy practitioners. Group session interventions were developed in a progressive style, guided by evidence-based research and an interconnected theoretical framework between the Ecological Model of Human Performance (EHP), the Polyvagal Theory, Cognitive Learning Theory, and Social Learning Theory. Through research and following a needs assessment, it was determined that there is a need for occupational therapists to address social skills development through a group setting. Group sessions for pediatric clients can allow for children to practice generalizing skills in a safe context with guidance from a group leader.

### Connecting Theory and Project Development

The *Social Skills Development: A Program for Pediatric Occupational Therapy Group Sessions* outline was heavily guided by a combination of theories. The Polyvagal Theory (Porges, 2003) led the creation of the initial sessions of this outline by connecting a child's understanding of their personal interoceptive cues to social skills development. The bulk of the session interventions incorporate the application of cognitive strategies to help children regulate their interoceptive cues. Therefore, the Cognitive Learning Theory (Piaget & Inhelder, 1969; Vygotsky, 1986) aided the creation of sessions requiring cognitive strategies. While this whole outline is centered around group therapy, the last three intervention sessions were largely centered on Social Learning Theory (Bandura, 1971; Bandura, 1989) as children learn best when interacting with others and learn through role modeling. The occupational lens of this project was guided by EHP (Dunn et al., 1994) as children are contextual learners and their performance range is impacted by their context. EHP guides occupational therapy practitioners on ways to adjust an intervention session to create a supportive context for the children.

## **Implications for Practice**

Pediatric occupational therapists can incorporate the resources and concepts from this project to create and implement social skills groups for children. The content within this project emphasizes a progression of social skills development by first identifying interoceptive cues and moving through to basic social skills development. This product emphasizes occupational therapy's role in social skills development in children as it relates to overall performance range. Occupational therapist can use this product to plan interventions that build social skills in the pediatric population. This product positively influences pediatric occupational therapy practice by giving a resource for group therapy to build social skills in children. While this product does influence the occupational therapy profession, it also has an impact on the pediatric population. This product positively impacts children's lives by giving them tools to appropriately regulate themselves when interacting with another person. This product was created to give children foundational strategies to use to further expand their social skills, making them more successful in social situations. Through this program and with the guidance of occupational therapy group leaders, children can build skills related to emotional regulation and social processing skills. Building these skills can help children build and maintain relationships with family members and peers, improving their overall performance range and occupational participation.

## **Strengths**

The content within this product was guided by credible research to determine the needs and best practice for pediatric occupational therapy and social skills development. After a determination of the need, this product was created to give pediatric occupational therapy practitioners the resource needed to create social skills groups. These groups will have a positive impact on a child's overall social skills development. Improving a child's social skills

development will lead to a child's ability to better connect with those around them, helping them build meaningful relationships at home, school, or elsewhere in the community. The basic outline of this product allows for practitioners to use their clinical reasoning to adapt within and across each individual session interventions as needed while maintaining the main concepts of each session. An overall evaluation tool was created to allow for continual reassessment of the effectiveness of this group.

### **Limitations**

Interventions within this social skills group outline were included in individual client sessions and not in a group setting. While group effectiveness was not addressed during the creation of this program, literature has defined the strength of developing social skills in children in a group setting. Therefore, effectiveness of interventions in a group has not been fully assessed and should be addressed in the future. While there is an evaluation tool created to assess the overall impact of this social skills group, an evaluation for each individual session has not been created, leaving occupational therapists to use their clinical judgement to evaluate the effectiveness of each individual intervention. This current product is intended for a narrow client population, specifically children in kindergarten through early middle school, and further expansion of this product should be completed in the future to reach other populations. Expanding this product further might alter the individual sessions and overall objectives to better fit the needs of the new target population.

### **Recommendations**

It is recommended that this current outline be implemented in a pediatric occupational therapy setting. However, this product is not limited to specifically outpatient services and can be implemented in any pediatric setting that facilitates occupational therapy groups. For

sustainability and continuation of this program, it is also recommended that further expansion of this product be completed to reach varying populations in the future. Expanding this product includes modifying session objectives and switching the pedagogical approach to better reach an expanded population. Research should be completed to ensure this product continues to include the most effective, evidence-based information for social skills development.

## **Conclusion**

Children require social connections to learn and to grow. This social skills group outline will provide pediatric occupational therapists with the resources necessary to implement a group directed towards building social skills in children. This product is intended to be used in pediatric occupational therapy practice and it is anticipated that through the use of the research and progressive framework included, social skills in children, such as self-awareness and emotional regulation, can be further developed. Pediatric occupational therapists can easily incorporate this eight-session social skills development group outline into their practice as a way to introduce social skills to their clients.



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## Appendix

### Product

Redacted for purposes of agency request. Please contact Stephanie Suedel at [admin@suedeltherapeutics.com](mailto:admin@suedeltherapeutics.com) for details.