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Parent & Caregiver Education And Support: A Product To Support Families Of Childrn With Senosry Processing Difficulties

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PARENT & CAREGIVER EDUCATION AND SUPPORT: A PRODUCT TO SUPPORT
FAMILIES OF CHILDREN WITH SENSORY PROCESSING DIFFICULTIES

by

Jaslyn Robb Seeley

Occupational Therapy Doctorate, University of North Dakota, 2022

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Submitted to the Occupational Therapy Department

of the

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This scholarly project, submitted by Jaslyn Seeley, OTDS 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.

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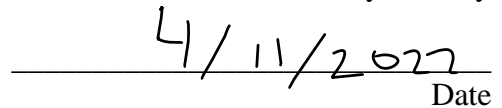
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Jaslyn Seeley



Date

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ABSTRACT

Purpose

Parent and caregiver collaboration, participation, education, and training has shown to improve therapeutic outcomes for the child receiving therapy services for sensory processing and integration challenges (Lin, Lin, & Yu, 2018; Miller-Kuhaneck & Watling, 2018; Schoen, Miller, & Flanagan, 2018; STAR Institute, 2021). However, parent education and training are often minimally conducted or lacking altogether in the therapeutic process (Gee & Peterson, 2016; Miller-Kuhaneck & Watling, 2018). This product was created with the purpose of enhancing parent and caregiver knowledge about sensory processing difficulties and to increase follow-through of sensory strategies across contexts, such as at home and school, in the therapy clinic, and within the community.

Methodology

The product was developed following a comprehensive review of literature that emphasized the need for increased parent and caregiver education and support throughout the therapeutic process. Following the review of available literature, an on-site needs assessment was conducted to determine educational topics to include within the product. The product materials were organized based on the Ecology of Human Performance (EHP) Model (Dunn, Brown, & McGuigan, 1994).

Results

The product includes instructional materials that can be accessible outside of the therapy clinic, such as written hand-outs with pictures and corresponding videos for parents to refer to when implementing sensory strategies. These educational resources are intended to reinforce the one-on-one education/discussions that occur during the individual therapy sessions. All instructional handouts were written to be at or below the eighth grade reading level to promote

readability and understandability for the population served. Each educational material includes specific strategies and recommendations for parents and caregivers to try with their child to improve or overcome the challenges associated with sensory processing difficulties.

Summary

The purpose of this product is to provide an outpatient pediatric clinic with resources and guidance to facilitate individualized parent education and support specific to the population served. Overall, the product should be utilized as both a direct and indirect service approach (AOTA, 2020) to enhance the child's occupational performance across various contexts.

Chapter I

Introduction

Problem Statement

The inclusion of parents and caregivers in the therapeutic process for children experiencing sensory processing and sensory integration difficulties is an important component in increasing the therapeutic outcomes of the child (American Occupational Therapy Association [AOTA], 2015; AOTA, 2021; Lin, Lin, & Yu, 2018; Miller-Kuhaneck & Watling, 2018; National Center on Birth Defects and Developmental Disabilities [NBCDDD], Center for Disease Control and Prevention [CDC], 2021a; Schoen, Miller, & Flanagan, 2018; STAR Institute, 2021). Despite the importance of parent and caregiver collaboration, participation, education, and training within the occupational therapy process, it continues to be an area that is often minimally performed or lacking altogether (Gee & Peterson, 2016; Miller-Kuhaneck & Watling, 2018). Individual and group-based parent and caregiver education and training has shown to enhance parent's self-perceived knowledge, actual knowledge, and perceived competency when responding to behaviors associated with sensory processing and sensory integration difficulties (Gee & Peterson, 2016). Increased education and perceived parental knowledge positively influence follow-through of implementation of sensory strategies across contexts (Gee & Peterson, 2016).

Children affected by sensory processing and sensory integration disturbances may be at an increased risk of experiencing additional developmental delays in fine and gross motor skills. The combination of sensory processing difficulties and developmental delays may create challenges in performing daily activities (Kelly, 2020; Miller-Kuhaneck, Madonna, Novak, & Pearson, 2015; Parham & Mailloux, 2020; STAR Institute, 2021). Children experiencing sensory

processing and sensory integration difficulties may additionally be faced with other co-occurring diagnoses, further impacting their ability to participate and engage in daily tasks (Arky, 2021; Bodison & Parham, 2018; Children and Adults with Attention-Deficit/Hyperactivity Disorder [CHADD], 2017; Kranowitz, 2005).

Sensory processing and sensory integration disturbances can be complicated for parents and caregivers to recognize and identify. One reason is that sensory processing difficulties are often mistaken as simply a behavioral issue due to the behaviors associated with the sensory processing difficulties (Arky, 2021; AOTA, 2021; Warwick, 2018). A second reason contributing to the strenuous effort to recognize and identify sensory processing difficulties is the lack of diagnostic and medical recognition in the Diagnostic and Statistical Manual, Fifth Edition (DSM-5) and International Classification of Disease, Tenth Edition (ICD-10; Arky, 2021; CHADD, 2017) This lack of recognition negatively impacts a parent/caregiver's ability to seek appropriate services, such as occupational therapy, in order to lessen the impact of sensory processing and sensory integration challenges on typical childhood development and family dynamics.

Purpose Statement

The purpose of this product is to provide an outpatient pediatric clinic with resources and guidance to facilitate parent education and support specific to the population served. Most of the population seen at this clinic includes children who are having trouble participating in daily tasks due to difficulties such as sensory processing and sensory integration disorders or may have an identified diagnosis such as autism spectrum disorder (ASD) or down syndrome. The occupational therapy practitioners providing skilled therapy services at the clinic identified a need for increased parent education and support to promote positive therapeutic outcomes for

their clients, and follow-through of sensory strategies across contexts. Educational topics included within the product were selected based on the needs identified following an extensive review of literature and a needs assessment of the parents and caregivers of children with sensory processing and sensory integration challenges. The product resources are intended to be utilized by the interprofessional team including occupational therapy practitioners and students, physical therapy practitioners, and speech-language pathologists. Overall, the product should be utilized as both a direct and indirect service approach (AOTA, 2020) to enhance the child's occupational performance.

Theoretical Framework

The Ecology of Human Performance (EHP) Framework (Dunn, Brown, & McGuigan, 1994) was utilized to guide creation and implementation of the product. EHP was used to guide the process of examining the relationship and dynamic interactions between the person, context, task, and performance of the child and parents (Dunn, 2017). EHP is intended to be utilized by interprofessional teams and provides a common language that will support collaboration during implementation of the product (Dunn, 2017). The framework's five therapeutic approaches to intervention (i.e., establish/restore, alter, adapt/modify, prevent, and create) will be threaded throughout the product to guide decision making to best support task performance across various contexts (Dunn, 2017).

Key Terms and Concepts

The following are terms frequently used throughout the project. To ensure effective and accurate understanding of the terms and concepts, definitions of each are presented below.

- **Occupational therapy:** “the therapeutic use of everyday life occupations with persons, groups, or populations (i.e., the client) for the purpose of enhancing or enabling participation” (AOTA, 2020, p. 1).
- **Occupations:** “the everyday activities that people do as individuals, in families, and with communities to occupy time and bring meaning and purpose to life” (AOTA, 2020, p. 7).
- **Therapeutic relationship:** “Socially defined and personally interpreted interactive process between the therapist and a client” (Taylor, 2008, p. 313).
- **Education (as an intervention):** “Activities that impart knowledge and information about occupation, health, well-being, and participation to enable the client to acquire helpful behaviors, habits, and routines” (AOTA, 2020, p. 61).
- **Training (as an intervention):** “Facilitation of the acquisition of concrete skills for meeting specific goals in a real-life, applied situation” (AOTA, 2020, p. 61).
- **Person:** An individual with a unique set of abilities, experiences, and person factors (Dunn, 2017).
- **Person factors:** Sensorimotor, cognitive, and psychosocial skills; abilities; and motivation (Dunn, 2017).
- **Task:** “An objective set of behaviors necessary to accomplish a goal” (Dunn, 2017, p. 211).
- **Context:** “A set of interrelated conditions that surrounds a person” consisting of temporal, physical, social, and cultural contexts (Dunn, 2017, p. 211).
- **Performance:** “Both the process and the result of the person interacting with context to engage in tasks” (Dunn, 2017, p. 211).

- **Performance range:** “the number and types of tasks available to the person based on the interaction between the person’s factors (their skills, abilities, and motivation) and the context variables (the supports and barriers)” (Dunn, 2017, p. 212).
- **Sensory processing and sensory integration:** the way in which sensory information is perceived, modulated, organized, and interpreted to successfully support an individual in their daily activities (AOTA, 2015; Kranowitz, 2005; Lin, 2020).

Introduction to Chapters

The following chapters describe the foundational basis supporting the need for the product and the process utilized to complete the project. Chapter II consists of a literature review highlighting relevant background information supporting the need for the product. Chapter III presents the methodology, outlining the procedures that guided decision-making for product completion. Chapter IV is an overview of the main aspects of the product resources and usability guidelines. Chapter V consists of a summary of the project, including recommendations and limitations of the product. A full list of references is provided, followed by Appendix A, the full product.

CHAPTER II

Literature Review

Person

Sensory processing and sensory integration refer to the way in which sensory information is perceived, modulated, organized, and interpreted to successfully support an individual in their daily activities (AOTA, 2015; Kranowitz, 2005; Lin, 2020). There are eight sensory systems supporting participation and engagement, including vision, auditory, olfactory, gustatory, tactile, proprioception, vestibular, and interoception (Champagne, 2018; STAR Institute, 2021). The sensations perceived by each sensory system is modulated, organized, and interpreted in the central nervous system (CNS; Parham & Mailloux, 2020). Typical CNS function and development is dependent on appropriate quantities of sensory input (Champagne, 2018; Parham & Mailloux, 2020). When well-regulated and properly functioning, these sensory systems contribute to appropriate development of physical, cognitive, and social skills (AOTA, 2015; Parham & Mailloux, 2020). Sensory processing and sensory integration disturbances occur when an individual has trouble interpreting and responding to the stimuli that comes through the senses (Parham & Mailloux, 2020; STAR Institute, 2021; Understood Team, 2021).

The recognition of sensory processing and sensory integration difficulties was first described and treated by Jean Ayers, an occupational therapist, in the 1960s (Bodison & Parham, 2018; McMahon, Anand, Morris-Jones, & Rosenthal, 2019; Kranowitz, 2005; Parham & Mailloux, 2020; STAR Institute, 2021). Ayres coined the term sensory integrative dysfunction, now commonly referred to as sensory processing disorder (*SPD*; Kranowitz, 2005; STAR Institute 2021). An individual who is affected with sensory processing and sensory integration challenges can experience difficulties with perceiving and organizing sensory information in one,

or a combination of, the eight sensory systems. When a child has difficulty processing and interpreting sensory information, the aim for remediation is known as an adapted response (Parham & Mailloux, 2020). An adapted response occurs when sensory information is integrated efficiently, to allow for successful participation when a child or person is surrounded by a challenging context (Parham & Mailloux, 2020).

Based on Ayre's body of research, there are four common categories of sensory processing and sensory integration challenges, including sensory reactivity, sensory discrimination and perception, vestibular-bilateral function, and praxis (Parham & Mailloux, 2020). Sensory reactivity refers to "CNS regulation of its own activity" (Parham & Mailloux, 2020, p. 519). Sensory discrimination is described as the brain's ability to detect and distinguish various types of sensations, while sensory perception refers to the way in which sensory information is interpreted in the brain (Champagne, 2018; Parham & Mailloux, 2020). Vestibular-bilateral problems are described as challenges with head and trunk control, bilateral coordination, balance, and vestibular-ocular function (Parham & Mailloux, 2020). Lastly, praxis, also referred as motor planning, is the ability to plan and complete a motor act successfully (Parham & Mailloux, 2020). There are three categories of sensory processing and sensory integration levels, consisting of mild, moderate, and severe, rating the impact the sensory challenges hold on a person's ability to function and perform daily activities (Champagne, 2018). With a mild rating, a person would demonstrate minimal difficulty when engaging in daily tasks, the moderate rating would be shown when a person's daily life is noticeably affected, and the severe category occurs when most of a person's daily life is interrupted by sensory disturbances (Champagne, 2018).

Sensory processing and sensory integration challenges are more commonly demonstrated in children experiencing developmental delays or behavioral conditions, such as ASD, attention deficit hyperactivity disorder (ADHD), and obsessive-compulsive disorder (OCD) or other anxiety disorders (Arky, 2021; Bodison & Parham, 2018; CHADD, 2017). However, an individual can experience sensory processing and sensory integration challenges without having a diagnosable disorder (Arky, 2021; Parham & Mailloux, 2020; Star Institute, 2021). It is estimated that about 80 percent of children diagnosed with ASD (AOTA, 2021) and 46-69 percent of children diagnosed with ADHD demonstrate symptoms of sensory processing and sensory integration disturbances (CHADD, 2017), as compared to only three to five percent of typically developing children impacted (Bodison & Parham, 2018; Gee & Peterson, 2016).

While the prevalence of sensory processing and sensory integration disturbances is high among children affected by developmental and/or behavioral conditions, sensory processing and sensory integration challenges often go overlooked and unrecognized for various reasons. First, sensory processing challenges are commonly mistaken as simply a behavioral issue (Arky, 2021; AOTA, 2021; Warwick, 2018). The diagnoses of ASD or SPD itself do not cause challenging behaviors, the behaviors may stem from external and/or internal issues (Autism Speaks, 2018b). For example, a child may be experiencing an internal irritation such as stomach pain or a headache, or a child may be responding to external stimuli such as excessive noise levels or the discomfort of clothing materials (Autism Speaks, 2018b).

Frequently, when children are experiencing sensory overload due to overstimulation of one or more sensory system, they may respond in a way that could easily be labelled as a 'difficult behavior.' Depending on the context surrounding the child and the task at hand, various behaviors may be demonstrated. The child can become overly excited, showing a higher level of

activity than they normally show, with observable behaviors of running, jumping, crashing, fidgeting, or yelling (Greutman & Kostelyk, 2018). Sensory overload may additionally be identified through meltdowns including aggressive behaviors of yelling, crying, kicking, screaming, irritability, refusal to participate in non-preferred activities, inability to focus or complete a task, and/or avoidance (Braaten, 2020; Greutman & Kostelyk, 2018). While these behaviors can be difficult to understand, the behaviors are serving as a form of communication, suggesting sensory overstimulation (Braaten, 2020; Greutman & Kostelyk, 2018; Warwick, 2018). Therefore, it is important to first question if there was a sensory antecedent that triggered the behaviors, prior to merely labeling a child's behaviors as 'difficult' (Warwick, 2018).

The behaviors demonstrated when a child is having difficulty modulating sensory input may be dependent upon the child's sensory reactivity. For example, an individual may be classified as sensory seeking or sensory avoiding based on their behaviors and responses to sensory stimuli. An individual who is sensory seeking has a high neurological threshold for sensory stimulation (Champagne, 2018). This can be demonstrated when a child appears to be unaware of, or hyporeactive to, sensory information or may require more sensory input than other children (Champagne, 2018; Morin, 2021; Parham & Mailloux, 2020), often craving and seeking increased sensory opportunities (Kranowitz, 2005). Children who are sensory avoiding have a low neurological threshold for sensory stimulation (Champagne, 2018). Sensory avoiders may overreact, or be hyperreactive, in response to sensations that don't seem to bother others (Morin, 2021; Parham & Mailloux, 2020). Sensory avoiders can become easily overwhelmed by situations which can lead to avoidance of certain sensory experiences altogether (Kranowitz, 2005; Morin, 2021; Parham & Mailloux, 2020).

Everyone reacts to sensory experiences uniquely, regardless of having a sensory processing or sensory integration disturbance, and various reactions can be observed depending on the type and severity of sensory input experienced (Morin, 2021). Personal reactions toward sensory stimulation may lead to severe responses and cause a person to completely disengage, avoid, or reject tasks and experiences (AOTA, 2015; Parham & Mailloux, 2020). For example, a child with sensory processing and sensory integration difficulties may avoid participating in personal hygiene tasks, such as showering and hair brushing due to tactile sensory aversions. Another example includes a child who is unable to sit still long enough to complete fine motor tasks (writing or cutting) at a table due to seeking vestibular and proprioceptive input. As the child continuously avoids, refuses, or struggles to participate in these tasks, the skills needed to complete them may not be developed. Additionally, an adapted response toward the sensory stimuli likely will not occur as the child is not getting the sensory input and experience needed to do so. When a child continuously avoids opportunities that are supportive of appropriate skill development due to sensory aversions, they are at an increased risk for experiencing additional developmental delays, further interrupting their ability to participate in daily activities (AOTA, 2015; Kranowitz, 2005; Parham & Mailloux, 2020).

In addition to sensory processing and sensory integration difficulties being inaccurately labelled as behavioral issues, a second reason explaining the strenuous effort to identify sensory processing and sensory integration challenges includes a lack of recognition in the medical community. Although described and treated since the 1960s, (Bodison & Parham, 2018; Kranowitz, 2005), SPD is not currently recognized as a diagnosable disorder in the most recent DSM-5 or ICD-10 (Arky, 2021; CHADD, 2017). However, sensory-based challenges are identified within the DSM-5 classifications for the diagnosis of ASD (Arky, 2021). One out of

every 44 children are diagnosed with ASD (Maenner et al., 2021), with up to 80 percent of those children diagnosed with ASD demonstrating sensory processing and sensory integration disturbances (AOTA, 2021). According to the DSM-5, to be diagnosed with ASD, a child must demonstrate persistent challenges in social skills and communication, and engage in restricted, repetitive patterns of behaviors (Miller-Kuhaneck et al., 2015; NBCDDD, CDC, 2021a). Children with ASD additionally demonstrate restrictions in choices of activities, interests, and play (AOTA, 2021). These atypical behaviors seen in individuals with ASD strongly reflect sensory processing disturbances (Arky, 2021).

The overall lack of recognition of sensory disorders in the medical community negatively affects a parent/caregiver's ability to understand and recognize the symptoms associated with SPD. This unawareness impacts their ability to seek out appropriate services as a treatment option. Without effective interventions, children with sensory processing and sensory integration disturbances face an increased risk of experiencing additional developmental delays, and their sensory issues can continue into adolescence and adulthood, further affecting daily life, school, and work performance (AOTA, 2015; Kranowitz, 2005). Difficulties processing sensory information in childhood is additionally related to the development of anxiety disorders and problems regulating emotions in adulthood, especially when maladaptive strategies are used to deal with sensory aversions (McMahon et al., 2019). Occupational therapy plays an important role in the early identification, evaluation, and treatment of children with sensory processing and sensory integration challenges. Occupational therapy additionally assists families with sensory processing and sensory integration difficulties to maximize function in daily living activities (AOTA, 2015).

Parents & Caregivers

Parents and caregivers are critical members of the therapeutic process. Collaboration with parents and caregivers throughout the entire OT process has resulted in improvement in therapeutic outcomes for the child receiving therapy services for sensory processing and sensory integration issues (Lin et al., 2018; Miller-Kuhaneck & Watling, 2018; Schoen et al., 2018; STAR Institute, 2021). Parents and caregivers of children experiencing sensory processing and sensory integration challenges often feel increased levels of stress and believe that they do not have adequate information and knowledge about their child's development and needs (Gee & Peterson, 2016; Jiriowic, Olson, & Astley, 2012; Miller-Kuhaneck et al., 2015; STAR Institute, 2021). Individual and group-based parent and caregiver education and training has been shown to enhance parent's self-perceived knowledge, actual knowledge, and perceived competency when responding to behaviors associated with sensory processing and sensory integration difficulties (Gee & Peterson, 2016). Increased education and perceived parental knowledge positively influence follow-through of implementation of sensory strategies across contexts (Gee & Peterson, 2016). Overall, collaborating with the family is of therapeutic benefit for both the child and parents.

Parent and caregiver education and training is important and vital to incorporate in the therapeutic process; however, it is only effective if parents and caregivers can attend and participate. Unfortunately, parents and caregivers are frequently unable to attend educational sessions due to time, scheduling, transportation, and physical constraints (Serwe, Hersch, Pickens, & Pancheria, 2017). In response to these constraints, telehealth methods have been trialed. Parent education groups delivered via telehealth increase the availability of parents and caregivers to participate and is an effective way to deliver health information. In a mixed-method

pilot study, telehealth sessions were perceived by parent participants to be beneficial and to be a useful approach to build relationships (Serwe et al., 2017). Parent coaching via telehealth methods has additionally demonstrated a significant increase in parenting efficacy, parent satisfaction with intervention goals, and has led to improvement in child performance (Little, Pope, Wallisch, Dunn, 2018).

Additional techniques to provide parents and caregivers with more information, despite constraints, include instructional materials which can be accessible outside of the therapeutic context, such as written hand-outs, pictures, and videos. Written handouts can be a beneficial instructional tool when intentionally created and used appropriately. The purpose of written materials is to reinforce verbal education, serve as a reference in the future, and outline procedural steps (Hainsworth & Jacobs, 2020). However, written materials are not deemed to be an influential tool when used in isolation, especially when literacy levels of the audience are not considered (Hainsworth & Jacobs, 2020). Including pictures and diagrams on written materials can increase recognition and recall, and reinforce the written data (Hainsworth & Jacobs, 2020). Utilizing videos as an educational means has multiple advantages, including being widely available and accessible for multiple viewings, cost-effective, practical, entertaining, and can enhance learning through the visual and auditory senses (Hainsworth & Jacobs, 2020). Video is a powerful approach to increase learners' understanding, knowledge, skills, and attitudes of both patients and caregivers regarding medical information (Hainsworth & Jacobs, 2020).

Instructional materials are utilized to reinforce the information being shared by the educator (Hainsworth & Jacobs, 2020), and when a variety of materials are provided, the learner can retain the information more efficiently. By targeting the cognitive, affective, and psychomotor learning domains, the educator is creating a conducive learning environment based

on the needs of the learner (Bastable, Myers, & Arnaud, 2020; Hainsworth & Jacobs, 2020).

Educational materials in which parents can access in various contexts and timeframes can be an important aspect included within the therapeutic process.

Moreover, parents of children with special needs often put their own wants and wellbeing aside, spending much of their time and energy responding to, and advocating for their child's demands. Grief, anger, guilt, vulnerability, isolation, stress, worry, and confusion are common reactions and emotions experienced by parents and caregivers of children with special needs, including children with sensory processing and sensory integration challenges (Autism Science Foundation, 2021; Autism Speaks, 2018a). With many difficult emotions to manage, developing positive self-care routines and habits can be beneficial to support parent health and wellness. A positive shift in parental health and well-being can subsequently affect the child's health and wellness. Self-care, mindfulness, exploration of parent's own interests, developing networks, and utilizing respite care are recommended methods for parents to engage in productive self-care (Autism Speaks, 2018a). Creating, maintaining, and modifying routines and habits to support health, wellness, and coping mechanisms for families is within the occupational therapy scope of practice (AOTA, 2020; Kuhaneck, 2020). In addition to education and training specific to the child with sensory processing and sensory integration difficulties, including educational topics such as self-care and sibling support in the therapeutic process may be beneficial to facilitate positive family dynamics and increased participation in daily activities. This can be accomplished using instructional methods of one-on-one education, written materials, and videos.

Parents & Siblings

It has been found that parents may benefit from receiving additional support for their typically developing children. The demands of parenting a child with special needs requires much parent and caregiver time, attention, and energy, leaving little time to focus and spend with their other children (Autism Speaks, 2018a). The role of being a sibling to a child with sensory processing and sensory integration difficulties is frequently accompanied by many challenges, emotions, and experiences that can be difficult to navigate and understand for both the sibling and parents (Autism Science Foundation, 2021; Autism Speaks, 2018a; Laverick-Brown & Stanek, 2014). Occupational therapy practitioners can provide education and recommendations to parents on how to best support their other children in dealing with the realities and everyday challenges of living with someone who has sensory processing and sensory integration difficulties.

It can be challenging for parents to foster sibling relationships between a child with special needs and a typically developing child (Autism Science Foundation, 2021; Autism Speaks, 2018a; Laverick-Brown & Stanek, 2014). Recommended strategies to foster positive sibling relationships include education about their sibling's diagnosis to enhance understanding and acceptance of their sibling, acknowledge and validate feelings without judgement, teaching the sibling how to play and interact with each other, share parental attention, and encourage attendance in sibling support groups (Autism Science Foundation, 2021; Autism Speaks, 2018a; Laverick-Brown & Stanek, 2014). Lastly, it is recommended to ensure that siblings have breaks and time apart from each other. Time apart can be promoted by encouraging siblings to participate in their own activities and interests (Laverick-Brown & Stanek, 2014). Overall, there are many demands accompanied by the parent and sibling roles to a child with sensory

processing and sensory integration challenges; including additional topics to promote increased self-care and family dynamics can be helpful to enhance performance in family daily life.

Task

Children experiencing sensory processing and sensory integration issues are reported to be at an increased risk of experiencing additional delays. Children who have sensory processing and sensory integration challenges often demonstrate delays with appropriate development, such as gross and fine motor skills, due to frequent avoidance of occupations and tasks that foster typical development such as personal hygiene tasks, dressing, play exploration, and certain play activities (AOTA, 2020; Kelly, 2020; Parham & Mailloux, 2020). Additional difficulties include decreased ability to fully participate in daily occupations such as activities of daily living (ADL), play, social participation, education, and sleep (Kelly, 2020; Miller-Kuhaneck et al., 2015; Parham & Mailloux, 2020; STAR Institute, 2021). Without proper development of physical, cognitive, and social skills, the tasks available to an individual to participate in and accomplish are decreased (Dunn, 2017).

To promote increased task performance, early intervention for children with sensory processing and sensory integration disturbances can foster positive results for the child. When sensory processing and sensory integration challenges are recognized and addressed early on, between birth to three years old, the child has an elevated possibility of developing the skills and abilities needed to maximize function to engage in meaningful tasks (Kranowitz, 2005; NCBDDD, CDC, 2021a). The effectiveness of early intervention services is due to the human brain being most adaptable during the first three years of a child's life (Kranowitz, 2005; NCBDDD, CDC, 2021b). In a Level II, retrospective chart review (Blanche, Chang, Gutiérrez, & Gunter, 2016) significant improvements were found in cognition, language, fine motor, and gross

motor skills of children with sensory processing and sensory integration challenges who participated in a sensory-enriched early intervention program. To further demonstrate the importance of early intervention services, children diagnosed with ASD who were most likely to be initially evaluated for services and treated at or before 36 months old demonstrated increased intelligence quotient (IQ) scores as compared to those who were most likely evaluated and treated after 36 months old (Maenner et al., 2021).

Supplementary methods to promote engagement in meaningful tasks for a child with sensory processing and sensory integration issues include establishing new skills and routines, creating and implementing sensory strategies to prevent overstimulation, modifying tasks and contexts, and/or altering the contexts in which tasks are performed. Skill and routine development can be targeted and facilitated through occupational therapy interventions (AOTA, 2020). With the establishment of specific skills (i.e., adapted response), a child may demonstrate improved person factors leading to an increase in ability to actively participate in daily tasks (AOTA, 2020; Parham & Mailloux, 2020). A sensory strategy would be appropriate to use when a child is experiencing consistent difficulty when engaging in specific tasks. Sensory strategies involve choosing positive sensory stimulation to support optimal engagement in daily tasks (Parham & Mailloux, 2020). The sensory techniques chosen must be client-centered, target the specific sensory systems the child is affected by, and support participation and performance (AOTA, 2020; Kuhaneck, 2020; Parham & Mailloux, 2020). Sensory strategies can be used to help integrate the sensory systems or can be utilized to prevent overstimulation. Preventing sensory overload can be accomplished by changing the task or context variables to decrease the possibility of encountering performance difficulties (Dunn, 2017). The modification of a task's features may be a necessary approach to support the child's performance with a task (Dunn,

2017). Any adjustment made to a task should present a just-right challenge, ensuring the task is not too complex or too easy, to ensure full participation of the child (Parham & Mailloux, 2020). Lastly, if available, altering the context may greatly increase an individual's ability to engage in tasks (Dunn, 2017; Parham & Mailloux, 2020). This can be completed by determining the best fit between the person factors, the context, and the demands of the task (Dunn, 2017).

Contexts

The temporal, physical, social, and cultural contexts surrounding a person greatly influence an individual's ability and availability to engage in daily tasks (Dunn, 2017). When an individual is struggling with task performance, it is vital to consider how each contextual domain is supporting or hindering the individual's performance range (Dunn, 2017). When the context surrounding a person is obstructing performance, it may be necessary to implement contextual modifications or alter the context entirely to promote greater independence and success with task performance (Dunn, 2017; Parham & Mailloux, 2020). The primary two contexts that need modifications for children with sensory processing and sensory integration challenges are the physical and social contexts (Bodison & Parham, 2018; Parham & Mailloux, 2020).

Physical

Typically, sensory contextual modifications are changes to the intensity, complexity, or quality of the physical context (Bodison & Parham, 2018). The physical context consists of the natural and created environments and objects surrounding the person (Dunn, 2017). An example of a modification to the physical context includes reducing the number of decorations in a classroom or otherwise decreasing visual stimuli. This is considered a contextual sensory strategy to prevent visual overstimulation of a child having difficulty with processing visual information. There are many ways to modify the physical context to best meet the needs of a

child. Implementing sensory strategies is considered an effective compensatory treatment option for children experiencing sensory processing and sensory integration challenges (Blanche et al., 2016). Contextual modifications can assist with the prevention of behavioral responses associated with sensory processing and sensory integration difficulties, as the adjustments made to the physical context can help the child cope and manage the sensory stimulation (Parham & Mailloux, 2020). The physical contextual changes may be particularly beneficial for children who are sensory seeking, due to the reduction or elimination of sensory stimuli fostering increased attention and participation (Parham & Mailloux, 2020).

Social

Equally important, the social context must be analyzed and accounted for to facilitate successful treatment and task performance for the child. The social context consists of any person or group in which an individual engages with (Dunn, 2017). This includes the child, parents or caregivers, siblings, and the therapist. The therapeutic relationship between the therapist, child, and parents is a vital component of the occupational therapy process (D'Arrigo, Ziviani, Poulsen, Copley, & King, 2017; Hines, York, & Kaul, 2020). When created and maintained, the therapeutic relationship can be utilized as a positive agent of change within the therapeutic means (Hines et al., 2020; Taylor, 2008). The successful development of a therapeutic relationship requires the therapist to intentionally apply their knowledge and skills to be of benefit to the client and family (Taylor, 2008). When therapists deliberately attend to the psychological needs of the parents and children, it has been shown to optimize parental and child involvement in therapy (D'Arrigo et al., 2017). This includes attending to the autonomy, relatedness, and competence of the parents and child to facilitate motivation and engagement in the therapeutic process (D'Arrigo et al., 2017). These psychological needs can be supported

through the affective, behavioral, and cognitive domains of learning (D'Arrigo et al., 2017). Each learning domain has a variety of teaching methods associated with it, and the therapist who selects appropriate teaching methods targeting all three domains is better able to facilitate learning of the parents and caregivers (Fitzgerald & Jacobs, 2020).

In addition to selecting appropriate teaching methods, a positive social context and collaborative therapeutic relationship can be fostered by the therapist intentionally choosing to share strength-based, optimistic comments about the child to the parents (Miller-Kuhaneck et al., 2015). Therapists who provided comments focusing on the child's strengths rather than their challenges were found to positively influence family interactions (Miller-Kuhaneck et al., 2015). Overall, it is important for therapists to consider the needs and well-being of the whole family, including attending to the psychological needs of the child and parents (D'Arrigo et al., 2017; Miller-Kuhaneck et al., 2015). Overall, each contextual domain should be considered to promote optimal performance in meaningful tasks across contexts (Dunn, 2017).

Performance Range

OT Services to Increase Performance Range

Occupational therapy services are documented as being one of the first treatment options for sensory processing and sensory integration challenges (Bodison & Parham, 2018; McMahon et al., 2019; Kranowitz, 2005;). Occupational therapy is recognized as an effective treatment service to increase the performance range of the child with sensory processing and sensory integration challenges and their family (AOTA, 2015; AOTA, 2021; Schoen et al., 2018; STAR Institute, 2021; Vanderbilt Evidence-based Practice Center, 2014). It is within the occupational therapy scope of practice to identify sensory factors interfering with a client's occupational performance, teach sensory strategies specific to the client utilizing a variety of sensory

approaches, and promote self- and family- awareness of sensory factors and strategies through education and training (AOTA, 2015). Occupational therapy practitioners are also well situated to address sensory processing and sensory integration disturbances based on their education and training in analyzing the dynamic interaction between the person factors, context, task, and performance (AOTA, 2020; Dunn, 2017). This training assists occupational therapy practitioners in addressing the impact that sensory processing and sensory integration challenges have on a child's ability to perform tasks across various contexts. Occupational therapy interventions for children affected by sensory processing and sensory integration difficulties should be client-centered, play-based, interactive, promote problem-solving (AOTA, 2021), and promote self-advocacy and empowerment (Dunn, 2017).

Occupational therapy practitioners are additionally trained to foster a collaborative, client-centered therapeutic approach with clients and their families to achieve positive therapeutic outcomes. It is best practice to include and collaborate with families, caregivers, and other members of the interdisciplinary team throughout the entire occupational therapy process for the child with sensory processing and sensory integration challenges (AOTA, 2015; AOTA, 2021; Lin et al., 2018; Miller-Kuhaneck & Watling, 2018; NCBDDD, CDC, 2021a; Schoen et al., 2018; STAR Institute, 2021). Parent participation, education, training, and coaching included within the occupational therapy process has been shown to be effective for increasing the performance range of both the child with sensory processing and sensory integration challenges and the parents (Gee & Peterson, 2016; Lin et al., 2018; Miller-Kuhaneck et al., 2015; Miller-Kuhaneck & Watling, 2018; Schoen et al., 2018; & STAR Institute, 2021). Despite having a large presentation of positive results, parent education and training is often minimally conducted

or lacking altogether in the therapeutic process (Gee & Peterson, 2016; Miller-Kuhaneck & Watling, 2018).

Lastly, occupational therapy treatment for children with sensory processing and sensory integration difficulties should target the development of adapted responses across contexts, encouraging the child to actively participate in activities that challenge the CNS to appropriately integrate the sensory experiences (Kranowitz, 2005; Parham & Mailloux, 2020). Active child participation is dependent of the child's inner drive (Kranowitz, 2005; Parham & Mailloux, 2020). A child's inner drive consists of their motivation to participate in the experiences that are supportive of developing an adapted response (Parham & Mailloux, 2020). Gaining a deeper understanding of the child's motivation (i.e., inner drive) can assist the therapist and parents in choosing tasks and contexts that are more likely to elicit active child participation (Parham & Mailloux, 2020). For example, the therapist should collaborate with the parents to determine activities that the child is motivated to participate in. If it is found that the child is motivated to swing, the therapist could try to use the swing to address additional therapeutic goals, such as increase in trunk control. The therapist could then encourage the child to lay on their stomach while on the swing (a motivating activity targeting the vestibular system) while tossing a bean bag into a bucket (targeting increasing trunk control and strength). This example emphasizes the importance of developing a good therapeutic relationship with the client and family to choose client-centered interventions to promote adapted responses for the child.

Summary

Overall, there are many variables affecting a child's ability to perform tasks. The child's performance range is determined by the dynamic interaction between person factors, the task at hand, and the context surrounding the person (Dunn, 2017). Children with sensory processing

and sensory integration disturbances may face increased challenges based on the type, frequency, and severity of the sensory experiences encountered in various contexts. Despite the challenges associated with identifying sensory processing and sensory integration difficulties, occupational therapy practitioners are equipped to evaluate and treat the sensory disturbances of children, regardless of a specific diagnosis (AOTA, 2015; AOTA, 2020). Skilled occupational therapy services and simultaneous parent education and training can positively influence the overall task performance across various contexts for the child experiencing sensory processing and sensory integration challenges (Gee & Peterson, 2016; Lin et al., 2018; Miller-Kuhaneck et al., 2015; Miller-Kuhaneck & Watling, 2018; Schoen et al., 2018; & STAR Institute, 2021). To address the lack of parent education and training in the therapeutic process (Gee & Peterson, 2016; Miller-Kuhaneck & Watling 2018), the *Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties* has been created. This product has been developed with the intent of enhancing parent and caregiver knowledge about sensory processing and sensory integration difficulties and to increase follow-through of sensory strategies across contexts. It is envisioned that the product will guide practitioners of the interdisciplinary team to facilitate individualized, client-centered parent education and support for families affected by sensory processing and sensory integration difficulties.

CHAPTER III

Methodology

Overview: The Process Unfolded

Since beginning as a student in the University of North Dakota (UND) Occupational Therapy Program, I have been interested in serving the pediatric population and their families. Based on past experiences, I have had a special interest in sensory processing and sensory integration challenges and have appreciated the importance of parent/caregiver education and training. When I first began brainstorming about my future Doctoral Experiential Placement (DEP), I knew I wanted to create a product that would be useful, beneficial, and supportive of the needs of the clients, parents/caregivers, and the facility in which I would complete the experience. To begin this process, I worked with my DEP coordinator and found a facility willing to collaborate with a student to develop a product that would meet the needs of both the population served and the facility. To create such a product, multiple actions and procedures were taken next.

Phase I of product development.

Guided by the steps outlined in Fazio (2017), product development began with phase I, ‘design and planning’, consisting of a theory selection and completion of a needs assessment. The needs assessment began with an informal interview with my site mentor to gather her professional perspective of the population and agency needs. Then, I conducted a comprehensive analysis of the literature. The selected theory, EHP, was used to guide discussion and organization of relevant topics in the literature review. This process confirmed the need and supplied evidence for the creation of a product to enhance the practitioner’s ability to facilitate parent/caregiver education and support at a pediatric outpatient clinic.

Resources, search terms, & criteria.

During the process of gathering resources for the literature review, various databases were accessed through the UND School of Medicine and Health Sciences (SMHS) library, Chester Fritz library, and the American Occupational Therapy Association, including the American Journal of Occupational Therapy, CINAHL Complete, ClinicalKey, ERIC, PubMed Central, SAGE Complete, and Wiley Online Library. Sources from governmental guidelines, experts in the field, and professional organizations were additionally utilized, contributing to the search for relevant literature. Multiple textbook sources were also used. The literature review was completed using the following search terms and phrases: “sensory processing OR sensory integration OR sensory processing integration,” “parent AND/OR caregiver education AND/OR training AND/OR coaching,” “occupational therapy,” “children,” “pediatric,” “child development,” and “outpatient therapy.” Articles and resources were included when addressing the topics of SPD, sensory integration, or sensory processing integration; parents and caregivers; education, training, or coaching; occupational therapy intervention or treatment; and SPD, developmental delay, ASD, or ADHD. Exclusion criteria included adults or geriatrics receiving therapy services for sensory processing and sensory integration challenges.

Population needs.

To further gather the needs based on the population perspective served at the facility, and to help determine educational topics that would be beneficial to include within the product, an anonymous, one-page survey for parents, caregivers, and/or grandparents was created and distributed to a sample of the population. Educational topics were then selected to be included within the product with respect and consideration of the survey responses. The purpose of the survey was to gather the subjective need for educational materials based on the parent population

of those served. The survey will additionally serve as a method for gathering the primary needs of the parents/caregivers during the initial evaluation process once the product is implemented. It will also be used as an outcome evaluation method to measure effectiveness of the product itself following implementation (Worrall & Sopeczyk, 2020). This step contributed to the development of the product structure completed in phase II and the product evaluation plan established in phase III of product development (Fazio, 2017).

Phase II of product development.

Next, phase II, ‘preparation and implementation’ (Fazio, 2017), was completed. The theoretical foundation, EHP, was utilized to guide creation and implementation of the product. EHP directed the examination of the relationship and dynamic interaction between the person, context, task, and performance of the child and parents/caregivers (Dunn, 2017). All product goals, objectives, educational sessions, and instructional materials are organized based on the theory of EHP. The product goals and objectives were established in collaboration with my site mentor. Intentional efforts were put forth to ensure that each goal was consistent with the site’s mission and vision statements and to ensure that the goals and objectives were reflective of the needs of the population (Fazio, 2017). Lastly, the educational sessions and materials were created and guided by EHP and the available evidence-based practice/guidelines for sensory processing difficulties. Each EHP intervention approach (i.e., establish/restore, alter, adapt/modify, prevent, and create) was incorporated throughout each instructional material and handout (Dunn, 2017).

Principles of andragogical learning, individual learning styles, literacy levels, and health literacy levels of the audience were considered and accounted for throughout the development of the product. Multiple instructional methods including written materials with pictures and videos

have been created to target individual learning styles and needs. These product resources should be utilized to reinforce the one-on-one education provided to clients and families by the practitioner at the time of their appointment. To ensure appropriate literacy levels of the written educational materials, the Flesch-Kincaid Grade Level (Worral & Sopeczyk, 2020) feature available in Microsoft Word was utilized. All printable educational materials were developed at or below the eight-grade reading level according to the Flesch-Kincaid Grade Level tool. This grade range was chosen based on supporting evidence estimating that the average reading level of the population is at or below the eighth-grade level (Worral & Sopeczyk, 2020). A select few of the written materials were identified above the eighth-grade level due to the extent of educational topic. In these cases, steps were taken to ensure that all technical terms were defined, the use of bold was used to highlight important aspects of the message, and advanced organizers were incorporated to help the reader focus on the message (Bastable, Myers, & Binion, 2020). The colors of red, yellow, and light blue were utilized consistently throughout the product to organize information and attract the reader (Bastable et al., 2020).

The written materials are additionally supplemented by videos to enhance comprehension and usability of the written materials (Bastable et al., 2020). Lastly, the Patient Education Materials Assessment Tool (PEMAT; Shoemaker, Wolf, & Brach, 2014) was applied to promote readability and actionability (Bastable et al., 2020) of the audiovisual materials. Each video received a scoring above 80%, indicating the audiovisual materials to be readable and usable to the audience (Shoemaker et al., 2014). The final aspect completed during phase II included creation of the marketing plan.

Phase III of product development.

Lastly, phase III, ‘program review and evaluation’ (Fazio, 2017), of the product development process was completed. In this phase, the evaluation plan for the product was created. The evaluation plan consists of a pre- and post- survey for parents, grandparents, and caregivers to complete. The pre-survey is intended to be utilized as a guide for practitioners to gather subjective information regarding the parent’s perceived knowledge of sensory processing and sensory strategies upon initial evaluation. The pre-survey also assists the practitioner to determine appropriate educational topics in which the client would find beneficial during the intervention process. The post-survey is intended to be an outcome (summative) evaluation method to determine the effectiveness of the educational methods and instructional materials utilized throughout the product (Worrall & Sopeczyk, 2020). The post-survey is intended to be distributed to parents, grandparents, and caregivers following implementation of the product. The evaluation plan will assist the practitioner to assess the overall benefit of the product itself and guide decision-making for the future/continued implementation of the product materials. Lastly, a post-survey has been created for staff at the clinic to fill out upon completion and implementation of the product itself. This survey is intended to measure the extent to which the product met its established goals and objectives. Overall, it is anticipated that this product will facilitate parent and caregiver education and support them in their role as parents/caregivers of a child with sensory processing difficulties.

CHAPTER IV

Product

Purpose

The *Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties* was developed to enhance parent and caregiver education and support throughout the therapeutic process. The purpose of the product is to promote parent and caregiver knowledge about sensory processing difficulties and to increase follow-through of sensory strategies across contexts (in the clinic, at home and school, and within the community). This product has been developed in collaboration with a site mentor, an occupational therapist employed at the outpatient pediatric clinic.

Vision

It is envisioned that the product resources will be used by the interprofessional team employed at the clinic (i.e., occupational therapy practitioners and students, physical therapy practitioners, and speech-language pathologists) to guide and facilitate individualized, client-centered parent education and support for clients and families experiencing difficulties with sensory processing. The product contains instructional materials that can be accessible to families outside of the therapy clinic, such as written hand-outs with pictures and corresponding videos. It is intended that the instructional materials will be made accessible through the clinic's official website and/or Facebook page to promote increased access to resources. Finally, it is envisioned that each instructional material can be read, understood, and used by the population served, to enhance their knowledge of sensory processing difficulties and help them implement strategies to improve their daily lives across contexts.

Full Product

The full product can be found in Appendix A. As part of the needs assessment, a pre-survey was handed out to a sample of the population to help determine the wants and needs of the clients and their families. This anonymous, one-page survey was used to gather the parent, grandparent, and caregiver perception regarding their knowledge of sensory processing difficulties and sensory strategies. The survey additionally included a list of potential educational topics to determine interest in each topic. Educational topics were then chosen with respect and consideration of the survey responses. The product contains an introduction, product goals and objectives, an explanation of the theoretical framework used, a practitioner user guide, educational sessions, a video series, a virtual parent support group, an evaluation plan, and a marketing plan.

The educational sessions included in the product consists of written handouts for the following topics: (1) sensory processing difficulties and the eight sensory systems (visual, auditory, olfactory, gustatory, tactile, proprioceptive, vestibular, and interoception) and includes sensory strategies specific to that sensory system for parents to apply at home and school; (2) sensory processing and developmental milestones including an overview of fine motor, gross motor, cognitive, and social emotional development, grasp development, appropriate development for the age ranges four months to six years old, and additional developmental resources for users to access; (3) an overview of routines and habits with visual schedules; (4) sensory processing and sleep; (5) a guide to haircuts including tips for barbers and stylists; (6) sibling support; (7) parent self-care; and (8) an outline for a virtual parent support group.

All written educational materials provided to a family should reinforce the one-on-one education and discussions that occur during individual therapy sessions. A nine-video

educational series was additionally created to supplement the handouts for the topics covered in Session I, including an overview of sensory processing difficulties and the eight sensory systems. Each topic is its own video. All videos are three minutes or less and were made to highlight the main aspects discussed in each educational handout. The videos provide a visual and auditory component to target multiple learning styles and preferences. Lastly, the first virtual parent support group was hosted in collaboration with a site mentor. This group was advertised in person, on flyers at the clinic, and on the site's Facebook page. Zoom was used as the virtual platform for this group. This virtual parent support group will occur monthly, and various topics related to the parent/caregiver role of raising a child with sensory processing difficulties will be covered. Overall, these instructional materials and support groups are intended to support the learning and therapeutic process for the child and family.

As outlined in the product table of contents, each session and/or subsection of the product can be utilized as a stand-alone educational topic and should be intentionally selected by practitioners for specific clients and their families. Therefore, it is more important for the practitioner to utilize professional reasoning to identify sections of the product to purposefully provide to parents and caregivers, rather than supply all educational topics to each client and family. The pre-survey developed for the needs assessment, can additionally be utilized during the initial evaluation to aid practitioners in better understanding the parent, grandparent, and/or caregivers' perception about their knowledge regarding sensory processing and sensory strategies. The survey also aids with objectively identifying educational topics that are of interest to the client.

Additionally, a post-survey has been created to measure the effectiveness of the educational materials (i.e., handouts and videos). The post-survey contains two Likert-scale

questions from the pre-survey to determine how the product resources impacted parents' perceived knowledge. Three additional Likert-scale questions and two open-ended questions are included in the post-survey to gather the subjective perspective of the effectiveness of the instructional materials. This post-survey is intended to be distributed after the clients have received the educational topics relevant to them. Lastly, a post-survey has also been created for practitioners at the clinic to fill out upon completion and implementation of the product itself. This survey is intended to measure the extent to which the product met its established goals and objectives. Both the pre- and post-surveys can be found in Appendix A, under the evaluation plan section of the full product.

Creation of the product and product materials were guided by the EHP framework (Dunn et al., 1994; Dunn, 2017). EHP guided the process of examining the relationship and dynamic interactions between the person, context, task, and performance of the child and parents (Dunn, 2017). The five EHP therapeutic approaches to intervention (as described in Figure 1) were incorporated throughout the design of the product to support task performance across various contexts (Dunn, 2017). The full product, *The Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties*, can be found in Appendix A.

Figure 1. EHP intervention approaches (Dunn, 2017).

Establish
Focusing on improving the person's skills and abilities.
Alter
Finding the best match between the person's abilities and the available contexts. The contexts themselves are not changed; the contexts are simply chosen to best fit the needs of the person.
Modify
Changing aspects of the context or the task to support the person's performance.
Prevent
Prevent the occurrence of the person having negative performance outcomes by changing the person, context, or task variables.
Create
Creating opportunities to support performance in tasks.

CHAPTER V

Summary

Project Overview

Parents and caregivers are critical members of the therapeutic process. Collaboration with parents and caregivers throughout the entire occupational therapy process has resulted in improvement in therapeutic outcomes for the child receiving therapy services for sensory processing and sensory integration issues (Lin et al., 2018; Miller-Kuhaneck & Watling, 2018; Schoen et al., 2018; STAR Institute, 2021). Parents and caregivers of children experiencing sensory processing and sensory integration challenges often feel increased levels of stress and believe that they do not have adequate information and knowledge about their child's development and needs (Gee & Peterson, 2016; Jiriowic et al., 2012; Miller-Kuhaneck et al., 2015; STAR Institute, 2021). Despite having a significant amount of supporting literature, parent education and training is often minimally conducted or lacking altogether in the therapeutic process (Gee & Peterson, 2016; Miller-Kuhaneck & Watling, 2018). Parents and caregivers additionally face difficulty attending in-person educational sessions due to time, scheduling, transportation, and physical constraints (Serwe et al., 2017).

To combat these constraints, the *Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties* has been created and implemented. The product contains instructional materials that are accessible outside of the therapy clinic, such as written hand-outs with pictures and supplemental videos. These educational resources are intended to reinforce the one-on-one education and discussions that occur during the individual therapy sessions. There are seven main educational sessions in the product, including an overview of the eight sensory systems, sensory processing and

developmental milestones, routines and habits, sensory processing and sleep, a guide to haircuts, sibling support, and parent self-care. Each main educational topic has subsections, that allow the practitioner to provide families with educational topics that are individualized, client-centered, and specific to the needs of the child/family. Lastly, a virtual parent support group was hosted for parents, grandparents, and caregivers of children with special needs or sensory processing difficulties. The virtual format was chosen to increase the availability of parents and caregivers to attend and participate. Additionally, the virtual format has been shown to be an effective way to deliver information and build a local network of support (Serwe et al., 2017).

Project Strengths and Limitations

The purpose of this product is to promote parent and caregiver knowledge about sensory processing and sensory integration difficulties and to increase follow-through of sensory strategies across contexts. Strengths of this product include readability, understandability, and actionability of the instructional materials. All written handouts were written to be at or below the eighth grade reading level to promote readability and understandability for the population served. Additionally, intentional efforts were made to ensure that all written handouts and videos addressed actions the user could take to promote follow-through of strategies across contexts. Each educational handout includes specific sensory strategies and recommendations for parents and caregivers to try with their child to improve or overcome the challenges associated with sensory processing difficulties.

Another strength includes the purposeful selection of topics included within the product. All educational sections were chosen based on an extensive review of literature and a needs assessment of population. Lastly, the product is strengthened by clearly organized content and on-going collaborative efforts with an expert in the field. The organizational style of the product

allows practitioners to easily use and distribute the resources to clients and families as needed. The future distribution of the product looks optimistic, as practitioners on-site have expressed enthusiasm to use and implement the educational resources in their role as therapists. Additionally, plans have been established to host the second monthly virtual parent support group. Overall, there are many qualities that strengthen this product to be of benefit to the clients and families served at this site.

Despite the strengths of this product, there are some limitations noted. One limitation is that the educational materials were developed primarily for children and families affected by sensory processing difficulties. While there are some resources that may be valuable to clients and families without sensory processing challenges, the entire product's usefulness is limited to clients and families with sensory processing difficulties. A second limitation is that all instructional materials are restricted to those who read and speak the English language. A third limitation is that only five participants attended the first virtual parent support group. While it is encouraging to have reached five participants, the small group size makes it difficult to determine the overall effectiveness of the group itself and creates uncertainty for the sustainability and future of the group.

Outcome Measures

To evaluate the effectiveness of the product, a pre- and post-survey was developed. The pre-survey, to be used during the initial evaluation process, can be utilized to gather the parent, grandparent, or caregiver perception of knowledge regarding sensory processing and sensory strategies. The pre-survey will additionally help determine educational topics that are of interest to the client and family. The post-survey, intended to be distributed after clients and families have received instructional materials, can be utilized as an outcome evaluation method to

determine the effectiveness and overall benefit of the product itself. Lastly, a post-survey has been created for practitioners to fill out, intended to measure the extent to which the product met its established goals and objectives.

Implications

This product was created to target all outcomes of the occupational therapy process according to the *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2020). Specifically, aiming to meet the outcomes of occupational performance, improvement, enhancement, health and wellness, quality of life, participation, well-being, and occupational justice (AOTA, 2020). This product is grounded in the theory of EHP, a model of occupation and incorporates its inclusive intervention approaches (Dunn, 2017). The dynamic relationship between the person, context, task, and performance of the child and parents were thoroughly examined through a perspective driven by EHP. This occupation-based, person-centered standpoint supports practitioners in their efforts to educate and support parents and caregivers of children with sensory processing difficulties. Overall, the product was created to increase follow-through of sensory strategies across contexts to improve a child's performance range and participation in meaningful occupations.

Further Development and Recommendations

To promote continued use of the product, a 'Practitioners Instructions' page and a supplemental PowerPoint was created to explain the intended use of the product. It is advised that all clinics be provided with a printed copy of the product, an electronic PDF version of the product, and have access to all supplemental videos. The supplemental videos have been posted with the corresponding handouts to the site's official website on a page specifically for the educational resources. This allows all clinics and clients/families to access these educational

materials covered in Session I of the product. Collaborative efforts with the site Director and Marketing Coordinator have been made to promote the product and services on the website and social media platforms. Lastly, it is suggested that all handouts and videos be used to market the company and services available.

To further develop the parent support group, it is suggested that the leader of the group loosely follow some type of structured format when hosting the group, such as Cole's Seven Steps (Cole, 2018). However, it is envisioned that the group eventually grow into a more 'parent-led' structure to allow for greater freedom and flexibility of the group dynamic. This type of group will take time to establish, and a structured format may be necessary for smooth transitions and flow during the first few meetings. Another recommendation is to begin each group session with a short educational topic, and then move into an open dialog for the group to carry on conversation about their role as a parent, grandparent, or caregiver in relation to the topic at hand. Once the group is established with consistent member attendance, it is suggested to market the group throughout the community to reach a larger population. There currently is not many, if any, parent support groups in Wyoming, and this type of group can be a powerful source of support for members. Lastly, purchasing a zoom account to allow meetings to last a full hour or more is recommended, to prevent being logged-off at 40 minutes. In sum, this product has many opportunities and has the potential to grow to best meet the needs of the population.

Conclusion

Parent education and support is important to include within the therapeutic process for children receiving skilled occupational therapy services. The product was created to support a practitioner's ability to facilitate individualized and client-centered education to improve the child's performance in tasks. This product has many characteristics that promote readability,

usability, and actionability for the client and their family. Overall, this product has the potential to enhance parent, grandparent, and caregiver knowledge and understanding of sensory processing difficulties and will encourage follow-through of sensory strategies across contexts such as in the clinic, at home and school, and within the community.

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Appendix A

Parent & Caregiver Education and Support:



A Product to Support Families of Children with Sensory Processing Difficulties

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Introduction

**Purpose & Vision, Goals & Objectives,
Theoretical Framework, & Practitioner
Instructions**



Introduction

Purpose

The *Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties* was developed following a comprehensive review of literature that emphasized the need for parent and caregiver collaboration throughout the therapeutic process. Parent/caregiver collaboration and participation has demonstrated improvement in therapeutic outcomes for the child receiving therapy services for sensory processing and integration challenges (Lin, Lin, & Yu, 2018; Miller-Kuhaneck & Watling, 2018; Schoen, Miller, & Flanagan, 2018; STAR Institute, 2021). This product has been developed for a pediatric outpatient clinic, and in collaboration with a Site Mentor and University of North Dakota Faculty Mentor. This product was created with the purpose of enhancing parent and caregiver knowledge about sensory processing difficulties and to increase follow-through of sensory strategies across contexts.

Vision

It is envisioned that the product resources will be used by the interprofessional team (i.e., occupational therapy practitioners and students, physical therapy practitioners, and speech-language pathologists) to guide and facilitate individualized, client-centered parent education and support for clients and families experiencing difficulties with sensory processing. The product



contains instructional materials that can be accessible outside of the therapy clinic, such as written hand-outs with pictures and corresponding videos. It is hoped that some of instructional materials and videos will be uploaded to the Site's official website and/or Facebook page to promote increased access to resources across the four clinics state-wide.

As outlined in the table of contents, each session and/or subsection of the product can (and should) be utilized as a stand-alone educational topic which is intentionally selected by practitioners for specific clients and their families. Therefore, it is more important for the practitioner to utilize professional reasoning to identify sections of the product to purposefully provide to parents and caregivers, rather than supply all educational topics to each client and family. Finally, it is envisioned that each instructional material can be read, understood, and used by the population served to enhance their knowledge of sensory processing difficulties and help them implement strategies to improve their daily lives.

Literacy, readability, and usability.

Individual learning styles, literacy levels, and health literacy levels of the audience have been considered and accounted for throughout the product. Multiple instructional methods including written materials with pictures and videos have been created to target individual learning styles and needs. These resources should



be utilized to reinforce the one-on-one education provided to clients and families by the practitioner at the time of their appointment. A variety of instructional materials allow each learner the opportunity to choose and use the materials that best fit their learning needs (Kitchie & Arnaud, 2020).

To ensure appropriate literacy levels of the written educational materials, the Flesch-Kincaid Grade Level (Worral & Sopeczyk, 2020) feature available in Microsoft Word was utilized. All printable educational materials were developed at or below the eight-grade reading level according to the Flesch-Kincaid Grade Level tool. This grade range was chosen based on supporting evidence estimating that the average reading level of the population is at or below the eighth-grade level (Worral & Sopeczyk, 2020). A select few of the written materials were identified to be above the eighth-grade level due to the extent of educational topic. In these cases, steps were taken to ensure that all technical terms were defined, the use of bold was applied to highlight important aspects of the message, and advanced organizers were incorporated to help the reader focus on the message (Bastable, Myers, & Binion, 2020). The colors of red, yellow, and light blue were utilized consistently throughout the product and were chosen to organize information and attract the reader (Bastable et al., 2020).

These written materials are additionally supplemented by videos to enhance comprehension and usability of the written materials (Bastable et al., 2020). Lastly,



the Patient Education Materials Assessment Tool (PEMAT; Shoemaker, Wolf, & Brach, 2014) was applied to promote understandability and actionability (Bastable et al., 2020) of the audiovisual materials. Each video received a scoring above 80%, indicating the audiovisual materials to be readable and usable to the audience (Shoemaker et al., 2014). Overall, this product is intended to promote practitioner's ability to facilitate effective education, training, and support to parents of children with sensory processing disturbances.

Icons and pictures.

The icons utilized throughout the product are available in the Microsoft Word features to subscribers of Microsoft 365, and free to use (Microsoft, 2022).

All pictures were taken and uploaded by me (Jaslyn Seeley) to promote understanding of the written material and provide a visual for users to refer to.

Signed permission was received from a local barbershop to utilize pictures of their property and is available upon request.

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Product Goals & Objectives

- **Goal #1:** Upon completion of the product, staff will have the resources they need to conduct individualized parent education, specific to the sensory needs of the child to promote growth and improvement on a variety of developmental skills.
- **Goal #2:** Upon implementation of the product materials, parents and caregivers will demonstrate increased perception of knowledge regarding sensory processing difficulties and sensory strategies to use across contexts to promote increased performance based on pre- and post- survey.
 - **Objective #1:** The product will include multiple instructional methods to target a variety of learning styles.
 - **Objective #2:** A pre-survey will be used to gather the learning needs of the population and individual client.
 - **Objective #3:** Measurement tools to assess literacy levels of instructional materials will be used to promote user inclusion, readability, and usability.



Theoretical Framework: Ecology of Human Performance

The Ecology of Human Performance (EHP) framework (Dunn, Brown, McGuigan, 1994) was utilized to guide creation and implementation of the product. EHP was used to guide the process of examining the relationship and dynamic interactions between the person, context, task, and performance of the child and parents (Dunn, 2017). EHP is intended to be used by interprofessional teams and provides a common language that will support collaboration (Dunn, 2017). The five therapeutic approaches to intervention (i.e., establish/restore, alter, adapt/modify, prevent, and create) have been threaded throughout the product to guide decision making to best support task performance across various contexts (Dunn, 2017).



EHP Intervention Approaches (Dunn, 2017)

Establish

Focusing on improving the person's skills and abilities.

Alter

Finding the best match between the person's abilities and the available contexts. The contexts themselves are not changed; the contexts are simply chosen to best fit the needs of the person.

Modify

Changing aspects of the context or the task to support the person's performance.

Prevent

Prevent the occurrence of the person having negative performance outcomes by changing the person, context, or task variables.

Create

Creating opportunities for person to support performance in tasks.



Practitioner Instructions

1. View the PowerPoint Presentation titled “Practitioner Instructions Voiceover” to learn about the product and how to use it. Click on ‘start slide show’ and then click on the three vertical dots located on the bottom of the screen to hear a voiceover with more information about the product. There is a voiceover for each slide. To access the Presentation, request the link.
2. Use the **table of contents** as a guide.
3. Each client and family have individual skills and difficulties. It is important to select specific sections or subsections of the product based on the needs of your client and their families.
 - a. The **pre-survey** is intended to be used as a tool to assist in identifying topics that would be most useful for your client and their families.
4. The written material **should reinforce the one-on-one education / discussions** you have with the clients and families and help support the educational process.
5. Once an appropriate section has been selected, you can print and highlight (optional) the information that you think would benefit the client and their family the most.
6. The developmental handouts could be a useful educational tool during a quick screening.
7. After providing clients and their families with these instructional materials, check back in with them at the next appointment. Ask them if they have tried any of the suggested strategies and question if they worked or not.
 - a. The **post-survey** is intended to be a helpful tool to use to better understand if the educational materials were helpful for your client and their families.



Video Resources & Handouts: Practitioner Instructions

A nine-video educational series was created to supplement the handouts for the topics covered under Session I: Overview of Sensory Processing Difficulties and the Eight Sensory Systems. Each topic is its own video.

All videos are three minutes or less and were made to highlight the main aspects discussed on each educational handout. The videos provide a visual and auditory component to target multiple learning styles and preferences.

The videos are available on the Site Website, under the tab labelled 'Resources'.

The password for this page has been set as: _____

The password can be provided to clients and families at your discretion. Once the password is shared, they will have access to all nine of the sensory processing handouts included within Session I, as well as access to all the corresponding videos.

You may find it helpful to provide clients and families with the following page to help them navigate the website and available resources.



Sensory Processing Video Resources & Handouts

To access the nine-video educational series on sensory processing difficulties and the eight sensory systems follow the steps below:

1. Go to the Website:
2. Click on the 'Resources' tab
3. Type in the password: _____
4. You will see the educational videos. Use the arrow on the right side of the screen to scroll over the view all nine videos.
5. Click on the blue button at the bottom of the page labelled 'view PDF handouts' to access all nine of the sensory processing handouts. This button will take you into a google drive folder.
6. You may download and/or print the handouts.



SESSION I

Overview of Sensory Processing Difficulties: Visual, Auditory, Olfactory, Gustatory, Tactile, Proprioceptive, Vestibular, and Interoception



Overview Sensory Processing and Activities of Daily Living

What is Sensory Processing?

Sensory processing is your brain's ability to take in sensory information from the 8 sensory systems and organize this information to help you complete daily tasks.

There are **8 sensory systems**:

- Visual (sight)
- Auditory (hearing)
- Olfactory (smell)
- Gustatory (taste)
- Tactile (touch)
- Proprioception
- Vestibular
- Interoception

Each sensory system works together to help you do the things you need to do daily.

What are sensory processing difficulties?

Sensory processing difficulties happen when your brain is not able to use sensory information effectively. This causes problems with doing the everyday tasks you need to do.

A child with sensory processing difficulties may:

- Cover their ears with loud noises
- Cover their eyes with bright lights
- Refuse to wear itchy or scratchy clothes (tags and seams)
- Appear clumsy or trip often
- Seek movement, crashing, and spinning
- Become easily overwhelmed when around others
- Avoid touching or eating food
- Have poor balance and poor body awareness

What are Activities of Daily Living?

Activities of daily living include the tasks that you do to **take care of your own body**. These tasks are completed on a regular basis, or as part of a daily **routine** (AOTA, 2020).

Types of activities of daily living: (AOTA, 2020)

- Bathing and showering
- Toileting and hygiene
- Dressing
- Feeding, eating, and swallowing
- Moving around in your environment
- Personal hygiene and grooming (brushing hair and teeth)

What can I do to help my child with sensory processing difficulties?









Occupational therapy can help your child improve the way they experience and respond to sensory information.

The goal of occupational therapy is to help your child perform their daily tasks independently.

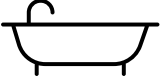
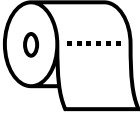




Occupational therapists can teach you strategies to help your child with sensory processing at home and school.



Overview of the Eight Sensory Systems

Overview of the Eight Sensory Systems		
Sensory System		Definition
Visual System		The ability to see the world around you
Auditory System		The ability to hear and listen
Olfactory System		The ability to smell
Gustatory System		The ability taste
Tactile System		The ability to feel touch , pain, pressure, and temperature
Proprioceptive System		The ability to know where your body is in space
Vestibular System		The ability to detect head and body movement
Interoception		Awareness of the internal state within the body such as hunger, thirst, and pain

How Sensory Processing Difficulties Impact Activities of Daily Living

How Sensory Processing Difficulties Impact Activities of Daily Living		
Activity of Daily Living		Example
Bathing and showering		Your child may become upset when taking a bath or shower
Toilet and hygiene		Your child may not recognize the need to go to the bathroom
Dressing		Your child may refuse to wear itchy or scratchy clothes (tags and seams)
Feeding and eating		Your child may avoid touching or eating certain food or textures
Moving around your environment		Your child may have poor balance and poor body awareness
Personal hygiene and grooming		Your child may avoid brushing their hair or teeth

What is the Visual System?

The visual system allows you to **see** the world around you.

It requires the **eyes and brain** to work together to recognize visual information, such as objects, shapes, color, and motion.

Signs that your child may be having difficulty with visual processing:

- Covers their eyes with bright lights
- Easily distracted by environments that are “visually busy”
- Difficulty identifying shapes, colors, letters, or objects
- Unable to find the things they are looking for
- Difficulty with judging distances or heights
- Difficulty with copying written material
- Poor hand-eye coordination
- Unable to color or cut in between the lines



If your child is having difficulty processing visual information, it may also be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Visual Processing at Home

Establish Skills and Tolerance

- Play games that involve sorting objects, colors, and shapes
- Complete puzzles or mazes
- Build something following a picture example (Legos, construction toys)
- Trace, cut, and color in between the lines
- Play catch
- Use subtitles with TV or videos
- Look at the clouds and find shapes

Alter the Context

- Choose a different room that is “visually quiet” to complete tasks
- Go to a room without windows or bright lights

Modify the Context or Task

- Dim the lights in a room to reduce the brightness
- Modify the amount of visual information your child sees at one time
- Use a slant board to move work closer to your child’s line of sight
- Put only needed items within your child’s line of sight

Prevent Bad Experiences

- Get your child’s eyes checked by an eye doctor to detect possible eye conditions and prevent further issues from occurring
- Keep areas free of clutter to limit visual distractions and prevent your child from becoming overwhelmed
- Give your child sunglasses to wear when in bright environments

Create Opportunities

- Make a “visually quiet” space for your child to go to when feeling overwhelmed
- Create a visual sensory toy or activity for your child to look at

Comments:



Strategies to Help Your Child with Visual Processing at School

Establish Skills and Tolerance

- Complete mazes, hidden pictures, or I-spy games
- Complete puzzles
- Trace, cut, and color in between the lines
- Copy written material
- Use subtitles with TV or videos
- Build something following picture examples

Alter the Context

- Complete assignments or tests in a “visually quiet” room
- Go to a room without windows or bright lights

Modify the Context or Task

- Use reading strips to limit lines seen when reading
- Use audiobooks or text-to-speech features
- Have the teacher read assignment directions aloud
- Reduce the amount of visual information seen
- Cover part of the work so that only part of the work can be seen
- Move your child’s desk closer to the board

Prevent Bad Experiences

- Get your child’s eyes checked by an eye doctor to detect eye conditions and prevent further issues from occurring
- Decrease clutter on your child’s desk to prevent your child from becoming overwhelmed
- Decrease clutter and decorations in the classroom
- Move away bright lights or windows

Create Opportunities

- Make assignments or tests with one question on each page to reduce the amount of visual information seen at one time

Comments:



What is the Auditory System?

The auditory system allows you to **hear** the world around you.

It requires the **ears and brain** to work together to understand sounds.

The auditory system is important for your child's development of language and communication skills, and ability to respond to spoken directions.

Signs that your child may be having difficulty with auditory processing:

- Covers ears with loud noises
- Difficulty following spoken directions
- Trouble understanding speech
- Asks for things to be repeated
- Becomes overwhelmed in noisy environments
- Cannot focus when there is background noise
- Unable to follow multi-step spoken directions



If your child is having difficulty processing auditory information, it may also be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Auditory Processing at Home

Establish Skills and Tolerance

- Allow your child to be in control of starting and stopping loud noises (vacuum, blender...)
- Have your child learn to play an instrument
- Use subtitles with TV or videos
- Ask your child to repeat verbal directions after they listen
- Provide one-step spoken directions and work your way up to two or three steps
- Play with puzzles or games that allow the child to have control over the sounds

Alter the Context

- Go to a private room that is quiet to complete tasks
- Choose games or activities that do not make loud or startling sounds

Modify the Contexts or Tasks

- Use visual and tactile prompts at the same time as spoken directions
- Use visual schedules
- Adjust the tv or radio volume to the comfort of your child

Prevent Bad Experiences

- Get your child's ears checked by a doctor for detection of ear issues and prevent further issues from occurring
- Use headphones when in noisy environments to prevent your child from becoming overwhelmed
- Use a quiet voice when speaking to your child

Create Opportunities

- Create a quiet space for your child to go to when feeling overwhelmed by noises
- Create visual schedules to help with follow-through and task completion

Comments:



Strategies to Help Your Child with Auditory Processing at School

Establish Skills and Tolerance

- Ask the child to repeat verbal directions after listening
- When giving spoken instructions allow extra time for the child to process what was said
- Use subtitles with TV or videos

Alter the Context

- Go to a quiet room to complete assignments or tests

Modify the Context or Task

- Give visual and tactile prompts at the same time as spoken directions
- Move closer to the teacher to reduce noisy distraction
- Give one-step spoken directions
- Give written instructions
- Use visual schedules throughout the school day

Prevent Bad Experiences

- Get your child's ears checked by a doctor for early detection of ear issues and prevent further issues from occurring
- Allow the child to use headphones to reduce the amount of noise heard
- Speak in a quiet voice when giving instructions
- Use a noise meter to keep a quiet classroom

Create Opportunities

- Create a quiet space in the classroom where the child can go when feeling overwhelmed by noise
- Create a "whisper game" for the entire class to play when it becomes noisy
- Create visual schedules for the entire classroom

Comments:



What is the Olfactory System?

The olfactory system is the sense of **smell**.

It requires the **nose and brain** to work together to recognize smells.

Signs that your child may be having difficulty with olfactory processing:

- Becomes easily upset when around smells
- Is unable to be in the same room with certain smells
- Won't attempt to eat a food because of the way it smells
- Is unable to tell different types of smells
- Gags or throws up with certain smells
- Distracted by smells other people don't seem to notice
- Seems to crave smelling things



If your child is having difficulty processing olfactory information, it may also be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Olfactory Processing at Home

Establish Skills and Tolerance

- Encourage your child to help with cooking and baking
- Allow your child to pick out the soaps, detergent, or shampoos/conditioners they use
- Use scented markers or paints for crafts to increase tolerance
- Play with scented Play-Doh
- Add essential oils onto a piece of fabric and place near the child
- Blow scented bubbles
- Go smell the flowers

Alter the Context

- Allow your child to go into a different room while you are cooking or baking

Modify the Context or Task

- Limit the variety of smells by using one brand or fragrance of soaps, detergents, and shampoos/conditioners
- Introduce new smells for a short period of time and then take away the scent
- Use unscented markers or paints when crafting if smells cannot be tolerated

Prevent Bad Experiences

- Avoid cooking with certain spices or smells that your child dislikes to prevent your child from becoming overwhelmed
- Use unscented soaps, lotions, detergents, shampoos, and conditioners to reduce the scents your child smells

Create Opportunities

- Create a fun “guess the smell game” to slowly introduce your child to new smells
- Create scented bottles with various scents
- Create scented tactile sensory bins to play in

Comments:



Strategies to Help Your Child with Olfactory Processing at School

Establish Skills and Tolerance

- Use scented markers or paints for crafts to increase tolerance
- Play with scented Play-Doh for a sensory break
- Blow scented bubbles during recess
- Go on a nature walk to smell the flowers

Alter the Context

- Allow your child to eat in a different room rather than the cafeteria where there are fewer smells

Modify the Context or Task

- Move your child's desk away from other students who often smell strongly
- Use unscented markers or paints when crafting if smells cannot be tolerated

Prevent Bad Experiences

- Reduce smells within the classroom by not using candles, air fresheners, or Scentsy's
- Prevent excess smells in the classroom by not using perfumes or lotions
- Use unscented soaps, lotions, detergents, shampoos, and conditioners to reduce the scents your child smells

Create Opportunities

- Create a science experiment to "discover" and learn about smells

Comments:



What is the Gustatory System?

The gustatory system is the sense of **taste**.

It requires the **tongue and brain** to work together to recognize tastes.

There are five types of tastes: sweet, salty, bitter, sour, and umami (savory).

The ability to taste plays an important role in eating. Food texture, temperature, and look play a role in your child's motivation to eat.

Signs that your child may be having difficulty with gustatory processing:

- Often puts non-food objects in their mouth
- Chews on shirts or clothing
- Seems to be a “picky eater” or refuses to try new food
- Cannot stand certain tastes or textures of food
- Dislikes brushing teeth
- May choke or gag
- Refuse to use eating utensils



If your child is having difficulty processing gustatory information, it may also be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child best be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Gustatory Processing at Home

Establish Skills and Tolerance

- Let your child explore new foods by touching them
- Role model for your child and describe what you are tasting, the texture, and the temperature of the food
- Drink something cold, drink something warm
- Let your child help with cooking, baking, or clean-up after meals
- Let your child help plan meals and choose one food item each meal
- Smash food with your fingers to learn about different food textures
- Use eating utensils in play (with Play-Doh, in a sensory bin...)
- Chew gum
- Blow up a balloon

Alter the Context

- Go outside and blow bubbles

Modify the Context or Task

- Cut up food into fun shapes to encourage your child to engage with new foods
- Watch pictures or videos of food
- Look up the restaurant menu before going to help your child know their options
- Use plates with dividers to separate different food groups
- Drink through a straw or sports bottle

Prevent Bad Experiences

- Introduce one taste at a time to prevent your child from becoming overwhelmed
- Say positive things about food to prevent your child from not trying new foods
- Preventing choking by giving food in small bites
- Choose preferred textures and foods to prevent gagging

Create Opportunities

- Create a fun “guess the taste” game
- Create visual schedules to help your child know what to expect
- Create a science experiment to “discover” and learn about all five tastes

Comments:

Strategies to Help Your Child with Gustatory Processing at School

Establish Skills or Tolerance

- Let your child help choose foods they eat throughout the school day
- Chew gum
- Use eating utensils in play (with Play-Doh, in a sensory bin...)
- Blow up a balloon

Alter the Context

- Go outside and blow bubbles during recess
- Allow your child to eat in a different room rather than the cafeteria where there are fewer smells and foods to see

Modify the Context or Task

- Pack your child's lunch instead of eating school lunches
- Cut up food into fun shapes to encourage your child to engage with new foods
- Drink through a straw or sports bottle

Prevent Bad Experiences

- Prevent choking by giving food in small bites
- Choose preferred textures and food to prevent gagging

Create Opportunities

- Create a science experiment to "discover" and learn about all five tastes
- Create visual schedules to help your child know when to expect a meal or snack

Comments:



What is the Tactile System?

The tactile system is the sense of **touch** and allows you to feel pain, pressure, and temperature.

It requires the **skin and brain** to work together to feel touch.

The tactile system helps to complete daily tasks such as getting dressed, brushing hair, bathing and/or showering.

Signs that your child may be having difficulty with tactile processing:

- Refuse to wear itchy clothes (tags and seams)
- Avoids messy play
- Becomes upset when food is on their hands and face
- Does not like to be touched or hugged by others
- Becomes upset with showering or bathing
- Avoids hair brushing
- Has difficulty walking barefoot on grass or carpets
- Tries to touch everything and everyone
- Does not react to pain or responds strongly to pain



If your child is having difficulty processing tactile information, it may also be causing difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and at school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Tactile Processing at Home

Establish Skills and Tolerance

- Allow your child to control the amount of touch they get during tasks
- Use a sensory bin with dried beans or rice
- Play with Play-Doh, slime, or shaving cream
- Play in water
- Draw with chalk or finger paint
- Have your child help with cooking and baking tasks
- Pet animals
- Encourage your child to walk barefoot
- Play dress-up with various types of clothing and textures

Alter the Context

- Go to the swimming pool
- Go outside and play in the dirt

Modify the Context or Task

- Use firm pressure instead of light touch
- Modify the amount of touch your child gets during tasks
- Allow your child to pick out clothing items to wear
- Encourage your child to wear sandals so they are exposed to tactile input on their feet
- Choose dry textures such as rice or beans and work your way toward playing with wet textures like slime or shaving cream
- Have your child try compressive clothing

Prevent Bad Experiences

- Remove clothing tags so that it does not itch your child's skin and prevent your child from becoming overwhelmed by the feeling
- Turn sock inside out so your child does not feel the seam

Create Opportunities

- Create a tactile sensory bin that has dried beans, rice, or beads in it
- Create a fun "tactile book" with various textured fabric to introduce different textures to your child

Comments:

Strategies to Help Your Child with Tactile Processing at School

Establish Skills and Tolerance

- Arts and craft activities
- Painting
- Encourage handwashing throughout the day
- Sit on a bean bag or fluffy chair
- Play in tactile sensory bins

Alter the Context

- Play outside in the dirt

Modify the Context or Task

- Use a vibrating pen for schoolwork
- Pop bubble wrap for a tactile sensory break during the school day
- Give your child a fidget such as a pipe cleaner or stress rock
- Have your child try compressive clothing
- Wear a weighted vest or use a weighted lap pad

Prevent Bad Experiences

- Make up a “hula-hoop” game to prevent extra touching from other students
- Choose clothing items that your child prefers to prevent them from becoming overwhelmed by the feeling

Create Opportunities

- Create a sensory tactile bin that has dried beans, rice, or beads in it
- Create a partner clapping game to play during a break

Comments:



What is the Proprioceptive System?

The proprioceptive system helps you know where your **body** is in space.

It requires the **proprioceptors** in your **muscles and joints** to send messages to your **brain** about where your limbs are in space.

This system also helps you know how much pressure or force to use during tasks.

Signs that your child may be having difficulty with proprioceptive processing:

- Running, jumping, and crashing into things
- Play rough
- Seem to accidentally hurt others when playing because they are unaware of the force they are using
- Often breaks the pencil lead because they are pushing down too hard
- Balance issues or falling often
- Uncoordinated movements / clumsiness
- Enjoys deep pressure input
- Difficulty locating body parts



If your child is having difficulty with processing proprioceptive information, it may also be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy that helps your child best may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Proprioception at Home

Establish Skills and Tolerance

- Animal walks (bear crawl, crab walk, kangaroo hops, snake slither, wheelbarrow walking)
- Engage in Yoga poses / stretching activities
- Give your child tight hugs
- Swim
- Have your child help to carry in grocery bags
- Talk to your child about each body part (arm, leg, nose, fingers...)
- Play follow the leader, copycat, or Simon Says
- Heavy work such as pushing/pulling activities (vacuum, move furniture, push the grocery cart, tug of war...)
- Give your child a massage or roll a therapy ball over them
- Jump on a trampoline

Alter the Context

- Choose a specific room in the house to allow for heavy work
- Go to the swimming pool

Modify the Context or Task

- Use a weighted blanket instead of a normal blanket
- Give your child a stress ball to squeeze throughout the day
- Do heavy work activities before seated activities

Prevent Bad Experiences

- Encourage heavy work breaks throughout the school day to prevent sitting for too long
- Use all “establish” strategies to prevent overstimulation and meltdowns

Create Opportunities

- Create obstacle courses to provide your child with proprioceptive input
- Create a game where your child gets rolled into a blanket like a burrito or taco

Comments:



Strategies to Help Your Child with Proprioception at School

Establish Skills and Tolerance

- Ask your child to carry books back to the library
- Have your child hold open a heavy door for other students
- Ask your child to wipe off the whiteboard
- Play follow the leader, copycat, or Simon Says
- Chew gum

Alter the Context

- Take your child into a different room to allow for movement breaks during the school day (jumping jacks, wall pushups, animal walks...)

Modify the Context or Task

- Modify school day schedules to allow for heavy work (animal walks, stretching, pushing against the wall)
- Place resistance bands on the bottom of your child's chair to allow for movement of the legs
- Give your child a stress ball to squeeze throughout the day
- Wear a weighted vest throughout the school day
- Use a wobble seat or a wobbly cushion when sitting at their desk
- Do heavy work activities before seated activities
- Wear compressive clothing

Prevent Bad Experiences

- Encourage heavy work breaks throughout the school day to prevent sitting for too long

Create Opportunities

- Create a "human paper shredder" game and allow the child to tear paper into tiny pieces for one minute
- Create learning activities that allow the students to move around
- Create a schedule that includes heavy work opportunities

Comments:



What is the Vestibular System?

The vestibular system helps you detect the **movements of your head and body**.

It requires your **inner ear and brain** to work together to process motion and body positioning.

It also helps you keep your balance and posture.

Signs that your child may be having difficulty with vestibular processing:

- Often falling / clumsiness
- Easily motion sick, car sick, or dizzy
- Dislike swings, slides, riding bikes or scooters, or jumping on a trampoline
- Fear of heights
- Difficulty sitting still
- Seem to never get dizzy and crave spinning
- Has poor sitting posture and rests head on table often
- Is fearful of going up or down stairs



If your child is having difficulty processing vestibular information, it may be creating difficulty for them to complete daily tasks.

There are strategies you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

Strategies to Help Your Child with Vestibular Processing at Home

Establish Skills and Tolerance

- Playground activities (swinging, sliding, climbing, running, jumping...)
- Have a dance party
- Balance on one foot
- Stand on two feet and close your eyes
- Hang upside down
- Jump on a trampoline
- Ride on a bike or scooter
- Animal walks
- Yoga

Alter the Context

- Go to the park and play on the playground equipment
- Choose a park that has smaller/lower playground equipment to help your child feel confident to explore and try new things that aren't as threatening

Modify the Context or Task

- Offer to go down the slide with your child to encourage them to slide down
- Offer to hold your child's hand while going down the slide
- Start by swinging low and slow, and work your way up to high and fast based on your child's comfort level

Prevent Bad Experiences

- Be careful with spinning activities to prevent dizziness, nausea, or vomiting. (Control the spinning motion and monitor your child's reaction. Try to limit spinning to ten times each direction.)

Create Opportunities

- Create an obstacle course (skipping, jumping, summersaults, scooter boards, leapfrog...)

Comments:



Strategies to Help Your Child with Vestibular Processing at School

Establish Skills and Tolerance

- Ask your child to pass out papers to the entire class
- Encourage your child to explore the playground during recess (swings, slides, climbing, see-saw...)
- Animal walks
- Jump rope
- Roll down a hill
- Use a scooter board
- Yoga

Alter the Context

- Go to the playground for movement breaks

Modify the Context or Task

- Allow your child to sit on a ball chair
- Give your child a wiggle seat or wobbly cushion to sit on
- Complete schoolwork standing up (on a whiteboard or tape paper on the wall)

Prevent Bad Experiences

- Be careful with spinning activities to prevent dizziness, nausea, or vomiting. (Control the spinning motion and monitor your child's reaction. Try to limit spinning to ten times each direction.)

Create Opportunities

- Create a balance game/obstacle course with tape on the floor for students to complete on breaks or transitioning to a different room
- Create learning activities/lessons that allow the students to move around

Comments:



What is Interoception?

Interoception is the awareness of the internal state **within the body**. It is the ability to **feel** what is going on inside your body.

It helps you recognize when you need to go to the bathroom, if you are hungry, thirsty, tired, sad, or in pain.

Interoceptive awareness helps you know when your body needs something and keeps you in a balanced state.

Signs your child may be struggling with interoception:

- Unable to recognize when they are hungry or full
- Does not know when they need to go to the bathroom
- Unusual responses to pain
- Difficulty with recognizing sickness
- Difficulty understanding or feeling emotions



These difficulties may also be causing difficulties in other tasks throughout your child's day.

There are things you can try to help your child perform better in daily tasks at home and school.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a trial-and-error process.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.



Strategies to Help Your Child with Interoception at Home

Establish Skills and Tolerance

- Deep breathing activities
- Mindfulness activities that help your child become aware of their bodies
- Yoga
- Role model for your child and describe the things you are feeling (“I feel hungry,” “My stomach hurts and I need to go to the bathroom,” “My body feels warm after exercising.”)
- Read books that help your child develop awareness of their body
- Ask your child to tell you how they are feeling when doing certain things (“How does your stomach feel after eating?”)
- Play an emotion-matching game
- Play a game of Simon Says (“Simon Says touch your stomach”)
- Play the game ‘Operation’
- Play “head, shoulder, knees, and toes” or “Hokey Pokey” games

Alter the Context

- Allow your child to explore their abilities in various contexts
- Unstructured play outside

Modify the Context or Task

- Use visual schedules to help remind your child when to go to the bathroom, eat, and drink
- Give your child reminders throughout the day to go to the bathroom, eat, drink, sleep...
- Give your child cards with pictures to help them describe what/how they are feeling
- Use technology or timers as reminders

Prevent Bad Experiences

- Label “hot” and “cold” on faucets
- Check in on your child after they fall or have an injury
- Give your child appropriate serving sizes to prevent overeating

Create Opportunities

- Create a “describe that emotion/feeling” game
- Create social stories

Comments:

Strategies to Help Your Child with Interoception at School

Establish Skills and Tolerance

- Talk about emotions and internal feelings throughout the school day
- Read books that help students become aware of their bodies
- Mindfulness activities that help your child become aware of their bodies
- Read books about emotional regulation
- Play a game of Simon Says (“Simon Says touch your stomach”)
- Yoga

Alter the Context

- Allow your child to explore their abilities in various contexts
- Unstructured play outside during recess

Modify the Context or Task

- Use visual schedules throughout the school day to remind the student to use the bathroom, eat, and drink
- Give your child visual cards to help them describe what/how they are feeling
- Use technology or timers as reminders

Prevent Bad Experiences

- Label “hot” and “cold” on faucets
- Check in on your child after they fall or have an injury (ask about pain or how they are feeling)
- Give your child appropriate serving sizes to prevent overeating

Create Opportunities

- Create a learning activity that encourages students to write down their emotions or feelings
- Create social stories for the class

Comments:



SESSION II

**Sensory Processing & Developmental
Milestones: Fine Motor, Gross Motor,
Cognitive, and Social Emotional
Development**



How Does Sensory Processing Impact Development?

If your child is experiencing **sensory processing difficulties**, they may also be having difficulty establishing other skills they need to do everyday tasks.

You may notice that your child might **often avoid or refuse** to do certain tasks.

If your child avoids or refuses to do certain tasks over time, they may have a harder time building important skills because they are not participating in the daily tasks that help them build those skills.

Minimal participation in daily tasks may lead to difficulties in 1 or more of the following **developmental categories**:

- **Fine motor**
- **Gross motor**
- **Cognitive**
- **Social emotional**

What are Fine Motor Skills?

Fine motor skills refer to your ability to use your **fingers, hand, and wrist** to complete fine (small) movements.

Examples:

- Picking up small objects with your fingers
- Writing
- Holding a pencil, marker, or crayon
- Cutting with scissors
- Buttoning a shirt
- Playing with Play-Doh or putty
- Typing
- Opening a water bottle

What are Gross Motor Skills?

Gross motor skills refer to your ability to use your **trunk (core), arms, and legs** to perform a whole body (gross motor) movement.



Examples:

- Sitting
- Creeping or crawling
- Walking
- Running
- Jumping
- Riding a bike
- Balancing on one foot

What are Cognitive Skills?

Cognitive skills refer to your ability to think, learn, reason, and remember.

Examples:

- Recognize familiar people and things
- Focus and pay attention to an object or task
- Reading
- Do math problems
- Problem-solve
- Sequence steps to do a task

What are Social Emotional Skills?

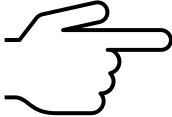


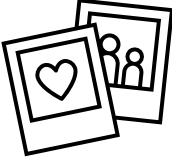
Social emotional skills help you connect with others and build relationships.

Examples:

- Smile at others
- Regulate your emotions
- Playing with others
- Talking with others
- Building self-control
- Developing social awareness (understanding how others are feeling)



Overview of the Developmental Categories

Skills		Definition
Fine Motor		Small movements with your fingers, hand, and wrist
Gross Motor		Whole body movement with your trunk (core), arms, and legs
Cognitive		Ability to think, learn, reason, and remember
Social Emotional		Connect with others and build relationships

Grasp Development*		
Palmar Grasp	4 – 6 Months	Figure 1
Raking Grasp	7 – 9 Month	Figure 2
Pincer Grasp	10 – 12 Months	Figure 3
Fisted Grasp	13 – 18 Months	Figure 4
Digital Pronated Grasp	1 Year 8 Months – 2 Years	Figure 5
Tripod Grasp	Static Tripod: 2 Years – 3 Years 6 Months Dynamic Tripod: 2 Years 8 Months – 3 Years	Figure 6

* Adapted from (Child Mind Institute, 2021; Myott, Rackley, Busch, & Hall, 2016; National Center on Birth Defects and Developmental Disabilities [NBCDDD], Centers for Disease Control and Prevention [CDC], 2021; Pathways, 2022).





Figure 1: Palmar Grasp (4-6 Months)



Figure 2: Raking grasp (7-9 Months)



Figure 3: Pincer Grasp (10-12 Months)



Figure 4: Fisted Grasp for Writing (13-18 Months)

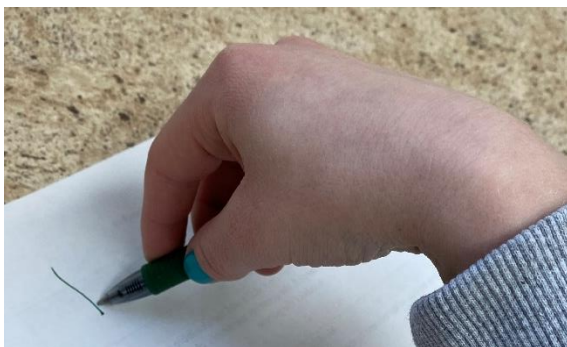


Figure 5: Digital Pronated Grasp for Writing (1 year 8 Months - 2 Years)

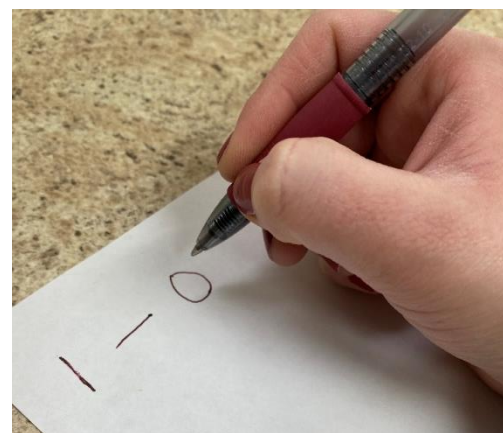


Figure 6: Tripod Grasp for Writing. Static Tripod: 2 Years – 3 years 6 Months. Dynamic Tripod: 2 years 8 Months – 3 years)



4 - 6 Months Old

Fine Motor Skills Expected of a Child 4 - 6 Months Old*

- Holds a toy and shakes it
- Brings hands to mouth
- Reaches for nearby objects while on tummy
- Uses a palmar grasp pattern (Figure 1)
- Transfers objects from one hand to another (Figure 2)

Gross Motor Skills Expected of a Child 4 - 6 Months Old*

- Lift head to 90 degrees while laying on their stomach
- Maintains head control with supported sitting
- Supports self on elbows while on their stomach
- Rolls from their stomach to their back at 4 months
- Rolls from their back to stomach by 6 months
- Supports self with hands while sitting
- Weight bearing on legs is emerging (not able to fully support weight yet)

Cognitive Skills Expected of a Child 4 - 6 Months Old*

- May repeat actions that produce good results
- Communicates happy or sad
- Responds to affection
- Recognizes familiar people and things

Social Emotional Skills Expected of a Child 4 - 6 Months Old*

- Participates in social play
- Interacts with people
- Separation anxiety begins because of an increase in awareness of strangers
- Makes different sounds for expression
- Babbles to get attention
- Smiles at others
- Tries to copy some movements and facial expressions (Figure 3)

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Encourage your child to lift their head and look at you or interesting toys
- Help your child learn how to support themselves with their elbows
- Motivate your child to reach for toys and pick them up with a palmar grasp (Figure 1)
- Help your child move through the rolling motion going from their stomach to their back

While your child is laying on their back

- Encourage your child to move toys from one hand to the other (Figure 2)
- Help your child move through the motion of rolling from their back to their stomach
- Interact and play with your child
- Try to have your child copy some of your facial expressions (Figure 3)

While your child is in supported sitting

- Help your child learn how to begin supporting themselves with their own hands while sitting
- Lift your child up and place their legs under them to start to support their own weight with their legs

Comments:



Picture Examples



Figure 1: Picks up small objects with thumbs and fingers (palmar grasp)



Figure 1: Palmar grasp

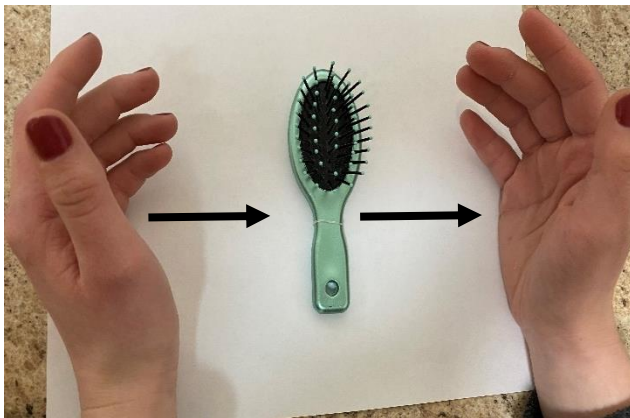


Figure 2: Transfers objects from one hand to another

Examples of movements and facial expressions to encourage your child copy you:

- Smile
- Look excited or surprised (raise eyebrows and slightly open mouth)
- Duck lips

Figure 3: Tries to copy some movements and facial expressions

7 – 9 Months Old

Fine Motor Skills Expected of a Child 7 – 9 Months Old*

- Reaches for objects while sitting
- Picks up small objects with thumbs and fingers (raking grasp) (Figure 1)

Gross Motor Skills Expected of a Child 7 – 9 Months Old*

- Sits without support
- Starts to creep and crawl
- Shows more control with rolling and sitting
- Supports whole weight on legs
- Begins to pull to stand

Cognitive Skills Expected of a Child 7 – 9 Months Old*

- Focuses on the action of objects
- Searches for hidden objects, can find partially hidden objects (Figure 2)
- Moves to get something
- Watches something as it falls

Social Emotional Skills Expected of a Child 7 – 9 Months Old*

- Continues to enjoy social play
- Recognizes own image in mirror
- Separation anxiety begins and may be afraid of strangers
- Strong bond with caregivers and may be “clingy”
- Recognizes own name
- Participates in two-way communication
- Imitates sounds
- Has favorite toys

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Use interesting objects or your child's favorite toy to encourage creeping and crawling
- Place a mirror in front of your child during tummy time
- Help your child move through the rolling motion going from their stomach to their back if they aren't doing this on their own yet
- Place blocks or similar items by your child to encourage them to pick them up with their thumb and fingers (Figure 1)
- Place your child on their hands and knees and help support their weight in this position to help them begin to creep and crawl

While your child is laying on their back

- Encourage your child to move toys from 1 hand to the other
- Help your child move through the rolling motion going from their back to their stomach if they are not doing this on their own yet
- Interact and play with your child
- Try to have your child copy some of your facial expressions

While your child is sitting

- Lift your child up and place their legs under them to encourage them to support their own weight with their legs
- Reduce the amount of support you are giving your child while they are sitting to help them sit without support
- Drop items in front of your child to have them watch the object while it falls
- Play "hide the toy" with your child to encourage them to search for partially hidden objects (Figure 2)

Comments:

Picture Examples



Figure 1: Picks up small objects with thumbs and fingers (raking grasp)



Figure 1: Raking grasp



Figure 2: Searches for and can find partially hidden objects

10 – 12 Months Old

Fine Motor Skills Expected of a Child 10 – 12 Months Old*

- Claps hands
- Voluntary release of objects
- Uses thumb and pointer finger to pick up small objects (pincer grasp) (Figure 1)
- Puts objects into a container (Figure 2 and 3)
- Poke with pointer finger (Figure 4)
- Wrist and fingers extend when reaching for and releasing objects

Gross Motor Skills Expected of a Child 10 – 12 Months Old*

- Shifts in sitting to pick up objects
- Creep and crawl
- Pulls to stand
- Cruises along furniture
- Stands alone momentarily
- May take 2 – 3 steps independently
- Walks with hands held

Cognitive Skills Expected of a Child 10 – 12 Months Old*

- Begins to recognize cause and effect
- Goal directed behaviors
- Responds to own name
- Looks at pictures in books
- Copies some gestures and play

Social Emotional Skills Expected of a Child 10 – 12 Months Old*

- Enjoys repetitive play such as peek-a-boo
- Awareness of self as separate from caregiver
- Continued separation anxiety, shy or anxious around strangers
- Responds to simple directions
- Begins imitative play
- Begins using hand gestures to communicate wants and needs
- May begin to help with dressing by putting out an arm or leg

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Place your child on their hands and knees and help support their weight in this position to help them with creeping and crawling
- Place toys or objects around them to encourage them to use a pincer grasp (with their thumb and pointer fingers) (Figure 1, 2, and 3)

While your child is laying on their back

- Clap your hands together to encourage your child to copy
- Play peek-a-boo with your child
- Play and interact with your child
- Try to have your child copy some gestures, facial expressions, and play actions

While your child is sitting

- Point and poke at objects with your pointer finger to encourage your child to copy (Figure 4)
- Place objects slightly further away from your child to encourage them to shift their weight to get the object
- Read picture books to your child

While your child is standing

- Reduce the amount of support you provide to your child while they are standing to help them stand alone briefly
- Hold your child's hands and support them to take a few steps

Comments:



Picture Examples



Figure 1: Uses thumb and pointer finger to pick up small objects (pincer grasp)



Figure 2: Puts objects into a container with a pincer grasp



Figure 3: Puts objects into a container with a pincer grasp



Figure 4: Poke with pointer finger

13 – 18 Months Old

Fine Motor Skills Expected of a Child 13 – 18 Months Old*

- Begins using second hand as a stabilizer
- Neat pincer grasp (Figure 1)
- Stacks 2 - 5 blocks (Figure 2)
- Scribble writing (Figure 3)
- Brings filled spoon to mouth
- Uses fingers to self-feed (Figure 1)

Gross Motor Skills Expected of a Child 13 – 18 Months Old*

- Walks independently
- Squat to pick up objects
- Walks backwards
- May begin to walk sideways
- Begins to kick ball without accuracy
- Throws tennis ball overhead
- Creeps up and down stairs
- Walks up the stairs with support

Cognitive Skills Expected of a Child 13 – 18 Months Old*

- Explores things in a new way
- Finds hidden objects easily
- Copies gestures
- Follows simple directions
- Begins to trial and error
- Understands function of objects and how they work
- Recognizes name of some body parts

Social Emotional Skills Expected of a Child 13 – 18 Months Old*

- Imitation of adult activities such as housework or shopping
- Cries when caregiver leaves
- Shows fear in some situations
- Helps with dressing by putting out an arm or leg
- May begin parallel play
- Exploratory/solitary play

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Give your child a crayon and paper to color/scribble with (Figure 3)
- Encourage your child to stack blocks (Figure 2)

While your child is laying on their back

- Try to have your child copy some gestures, facial expressions, and play actions
- Talk about body parts while pointing to them (arm, hand, eyes, mouth...)

While your child is sitting

- Encourage your child to throw a ball at you overhead
- Have your child try to kick at a ball while sitting
- Hide an object or toy and encourage your child to find it
- Provide your child with toys that can be used in different ways to encourage them to explore the item
- Allow your child to try to bring a filled spoon to their mouth by themselves
- Provide your child with finger foods to self-feed (Figure 1)

While your child is standing or walking

- Reduce the amount of support you provide your child while they are standing or walking until they can do so on their own
- Hold your child's hands and support them to walk
- Encourage your child to try creeping up and down stairs
- Encourage your child to squat to pick up items

Comments:



Picture Examples



Figure 1: Neat pincer grasp to self-feed



Figure 2: Stack 2 – 5 blocks



Figure 3: Scribble writing with a fisted grasp



19 – 24 Months Old

Fine Motor Skills Expected of a Child 19 – 24 Months Old*

- Proficient reach for objects
- Digital pronated grasp with writing (Figure 1)
- Copies a vertical line by 24 months (Figure 1)
- Stacks 4 - 8 blocks (Figure 2)
- Drinks from cup independently
- Uses 2 hands but for different actions

Gross Motor Skills Expected of a Child 19 – 24 Months Old*

- Walks independently
- Squats to pick up objects
- Throw and kick a ball
- Walks up the stairs with support
- Begins to run
- Begins to jump 2 inches off the ground

Cognitive Skills Expected of a Child 19 – 24 Months Old*

- Attends to shapes of objects (Figure 3)
- Uses inanimate objects to perform an action (Figure 4)
- Recognizes that hidden objects still exist
- Can link multi-step actions
- Names objects and pictures
- Identify 3 - 5 body parts (Figure 5)

Social Emotional Skills Expected of a Child 19 – 24 Months Old*

- Shows frustration often resulting in a tantrum
- Uses gestures and words during pretend play
- Parallel play
- Exploratory/solitary play

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Encourage your child to stack blocks (Figure 1)
- Play a game that involves reaching such as a “shape sorter” game or large Lego sets (Figure 2)

While your child is laying on their back

- Show your child how to use inanimate objects to perform an action while playing (Figure 3)
- Talk about body parts while pointing to them (arm, hand, eyes, mouth...) (Figure 4)

While your child is sitting

- Read picture books to your child and encourage them to name the pictures
- Show your child how to drink from a cup by themselves
- Encourage your child to continue to throw a ball overhead

While your child is standing, walking, running, or jumping

- Reduce the amount of support you provide your child while they are standing or walking if they are unable to do so on their own yet
- Play games that could involve walking, running, or jumping
- Encourage your child to jump
- Encourage your child to go up and down the stairs with or without support
- Have your child try to kick at a ball

Comments:



Picture Examples



Figure 2: Digital Pronated Grasp with Writing - Copies a Vertical Line

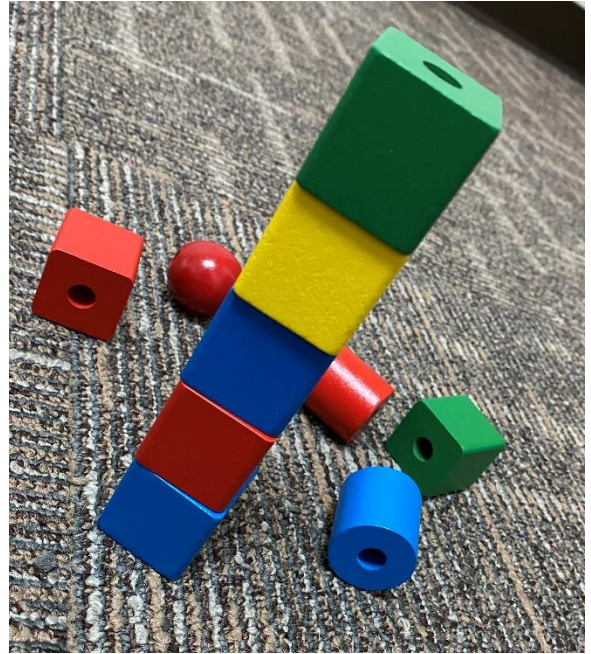


Figure 2: Stack 4 - 8 Blocks



Figure 3: Attends to shapes of objects

Examples of how to use an inanimate object to perform an action:

- Fly a superhero toy
- “Fight” with two dinosaur toys
- Use a teddy bear to read a book
- Crash a Lego piece into another toy

Figure 4: Uses inanimate objects to perform an action

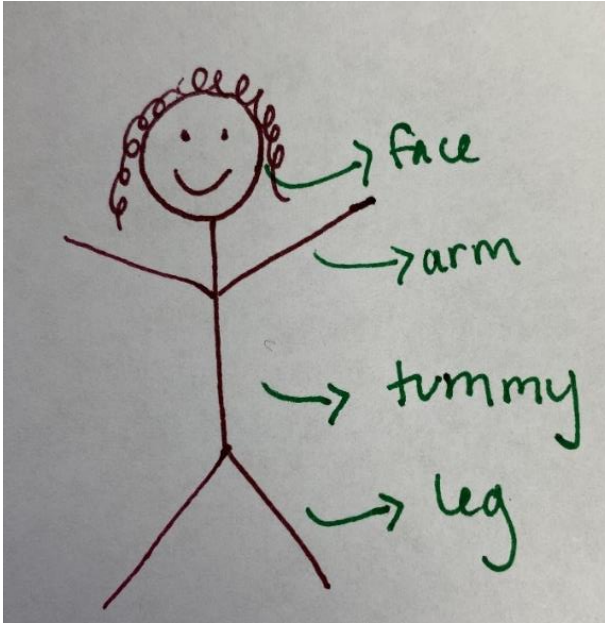


Figure 5: Identify 3 - 5 body parts

2 - 3 Years Old

Fine Motor Skills Expected of a Child 2 – 3 Years Old*

- Refinement of strength and control
- Tripod grasp (Figure 1)
- Stacks 9 or more blocks (Figure 2)
- Makes or copies straight lines or a circle (Figure 1)
- Snips paper with scissors or cuts paper in half
- String large beads (Figure 3)
- Both hands active when playing with objects
- Fork held with fist grasp (Figure 4)

Gross Motor Skills Expected of a Child 2 – 3 Years Old*

- Walks backwards 10 feet
- Walks on tiptoes
- Runs easily
- Jumps 4 inches off the ground
- Hop on 1 foot
- Balances on 1 foot for 5 seconds
- Kicks a ball
- Catches a large ball with arms and body
- Begins to walk up and down stairs with alternating feet
- Climbs up and down slide
- Begins to pedal tricycle (Figure 5)

Cognitive Skills Expected of a Child 2 – 3 Years Old*

- Uses multiple actions to play
- Creates imaginative play and make-believe play
- Understands “mine” and “yours”
- Asks “what” “where” and “why” questions
- Begins to sort shapes and colors
- Follows 1-step directions (Figure 6)
- Completes 3 – 4-piece puzzles by age 3 (Figure 7)
- Uses imaginary objects in play by age 3



Social Emotional Skills Expected of a Child 2 – 3 Years Old*

- Inflexible in routine
- Knows own gender
- Establishes ownership of belongings
- Desire for control
- Says “no” often, begins to show defiant behavior
- Asks “what” and “why” questions
- Imitates others’ behaviors
- Gets excited when around other children
- Begins to take turns by age 3
- Shows many emotions by age 3
- Independent/symbolic play

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Encourage your child to continue to play on their stomach to support trunk and arm strength (this will help with refine fine motor skills)
- Encourage your child to stack blocks (Figure 2)

While your child is laying on their back

- Play games that require both hands (connecting Velcro toys, large Legos...)

While your child is sitting

- Place your child onto a tricycle and encourage them to pedal (Figure 5)
- Provide 1-step directions to your child (Figure 6)
- Encourage your child to complete large 3 – 4-piece puzzles (Figure 7)
- Play a game that involves sorting shapes and colors
- Allow your child to begin using a fork while eating (Figure 4)
- Play games that require both hands (roll Play-Doh, string large beads...) (Figure 3)
- Show your child a tripod grasp and encourage them to copy a straight line or circle (Figure 1)

While your child is standing, walking, running, or jumping

- Play catch with a large ball
- Have your child stand or hop on 1 foot
- Help your child climb up and down a slide
- Play games that involve walking, running, and jumping
- Kick at a ball
- Encourage your child to walk up and down stairs with alternating feet

Comments:



Picture Examples

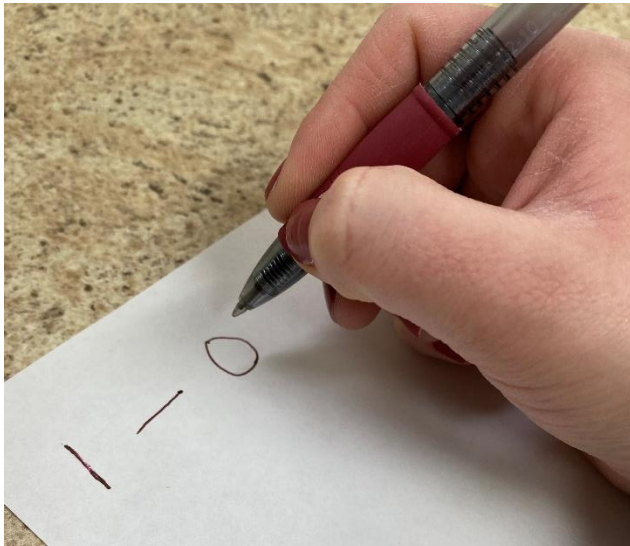


Figure 3: Tripod grasp and copying straight lines and a circle



Figure 2: Stack 9 or more blocks

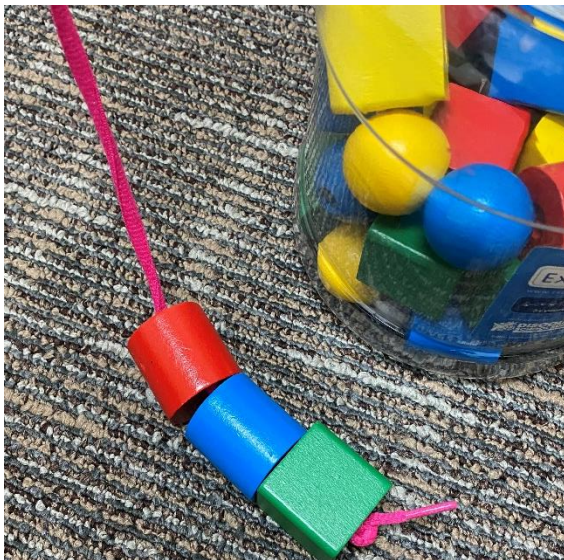


Figure 3: Sting large beads



Figure 4: Holds a fork with a fist grasp





Figure 5: Pedal a tricycle

Examples of 1-step directions:

- Find your shoes
- Pedal the bike
- Jump!
- Use your fork to eat
- Stack the blocks

Figure 6: Follows 1-step directions



Figure 7: Large 3 - 4 Piece Puzzle Using a Pincer Grasp

4 - 5 Years Old

Fine Motor Skills Expected of a Child 4 – 5 Years Old*

- Opposes thumb to fingers (Figure 1)
- Grasp patterns established (Figure 2)
- Hand dominance gradually increasing
- Copies a cross, square, H, V, X (Figure 2)
- May write own name and some letters
- Draw a person with 2 – 4 parts
- Glues paper to another piece of paper
- Cuts with scissors on curves and line within a quarter of an inch
- String small beads (Figure 3)

Gross Motor Skills Expected of a Child 4 – 5 Years Old*

- Gallops
- Skip-hop (1 foot)
- Catches large ball with hands
- Pedals tricycle easily
- Somersaults forward
- Begins to swing by themselves

Cognitive Skills Expected of a Child 4 – 5 Years Old*

- Begins to follow game rules
- Names some colors (Figure 4)
- Understands concept of counting and can count to 10 or more by age 5
- Begins abstract problem solving
- Can help to plan
- Simple reasoning by age 5
- Focus on a task with distractions present (5 – 10 minutes)
- Initiate a task by themselves
- Begins to follow left to right orientation of a book

Social Emotional Skills Expected of a Child 4 – 5 Years Old*

- Begins to show a sense of humor
- Associative/imaginary play



- Social play
- Interested in new experiences
- Cooperates with other children
- Begins to want to please friends by age 5

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

Many of these strategies can be attempted in **different positions** than listed on this handout. These are just suggestions, and it may be a **trial-and-error process** to find the right strategy for your child.

You may find it helpful to check the box for each strategy you try. Fill in the blank “Comment” box at the bottom of the page describing which strategy worked or did not work for your child.

Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Encourage your child to string small beads (Figure 3)
- Encourage your child to try a somersault forward
- Have your child pick up objects that require opposition of their thumb and fingers (Figure 1)

While your child is laying on their back

- Ask your child to name the colors they see (Figure 4)
- Count to 10 or more with your child

While your child is sitting

- Encourage your child to draw a person or copy a cross, square, H, V, or X (Figure 2)
- Do a craft that involves coloring, cutting, and gluing
- Help your child begin to write their name
- Place your child on a tricycle and encourage them to pedal on their own
- Encourage your child to swing independently
- Play games with rules and encourage your child to follow them
- Read a book and point with your finger to have your child follow the left to right orientation

While your child is standing, walking, running, or jumping

- Create an obstacle course that includes running, balancing, galloping, and skip-hopping
- Play catch with a large ball
- Kick at a ball

Comments:



Picture Examples



Figure 1: Opposes thumb to fingers



Figure 2: Tripod grasp to copy a cross, square, H, V, and X



Figure 3: String small beads

Things to say to help your child name colors:

- “Look at those green trees”
- “The sky is blue”
- “Do you want to wear green or blue?”
- My shirt is yellow”

Figure 4: Name colors



6 Years and Older

Fine Motor Skills Expected of a Child 6 Years and Older*

- Basic fine motor skills should be achieved and continue to be refined (Figure 1)
- Hand dominance gradually increasing
- Makes up own spelling
- Copies a triangle and rectangle (Figure 1)
- Draw body with 7 or more parts
- Cuts pictures out on the line with scissors
- Dresses and undresses independently
- Uses eating utensils (spoon, fork, sometimes a knife)
- Can use the toilet on their own

Gross Motor Skills Expected of a Child 6 Years and Older*

- Bounce and catch a tennis ball by themselves
- Dribble a ball while walking forward
- Skip with alternating feet
- Tandem walk forward and backward
- Ride bike without training wheels
- Swing independently
- Roller skate
- Stand on one foot with eyes closed for 5 seconds

Cognitive Skills Expected of a Child 6 Years and Older*

- Begin to understand others' feelings
- Simple reasoning for problem solving
- Begin abstract reasoning
- Begin to self-regulate (Figure 2)
- Increased attention span
- Count to 100
- Complete simple math (addition and subtraction)

Social Emotional Expected of a Child 6 Years and Older*

- Empathy evident



- Use of feeling words increases (Figure 3)
- Increased ability to self-regulate
- Often have same-gendered friends
- Plays by rules more consistently
- Cooperative play
- Competitive play

*Adapted from (Child Mind Institute, 2021; Myott et al., 2016; NBCDDD, CDC, 2021; Pathways, 2022).



Directions:

The following pages have tips to try to help your child establish skills.

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Picture examples are provided on the last pages of the handout and are labelled as a “Figure” throughout the handout.

Continue to talk with your therapist about other strategies to try to help your child establish these milestones.



Strategies to Help Your Child Establish These Skills

While your child is laying on their stomach

- Do simple math problems with your child
- Role model talking about feelings with your child to help them use feeling words (Figure 3)
- Play a game while lying on your stomach

While your child is laying on their back

- Count to 100 with your child
- Role model self-regulation strategies (taking deep breaths, squeezing your hands, counting to ten...) (Figure 2)

While your child is sitting

- Encourage your child to draw a person or copy a triangle or rectangle (Figure 1)
- Complete crafts that involve coloring, cutting, and gluing
- Have your child use eating utensils independently
- Encourage your child to use the toilet by themselves

While your child is standing, walking, running, or jumping

- Create an obstacle course that involves running, skipping, tandem walking, and riding a bike
- Play balance games and stand on 1 foot for 5 seconds
- Encourage your child to swing independently
- Play basketball and begin to dribble the ball while walking forward
- Encourage your child to get dressed independently

Comments:



Picture Examples

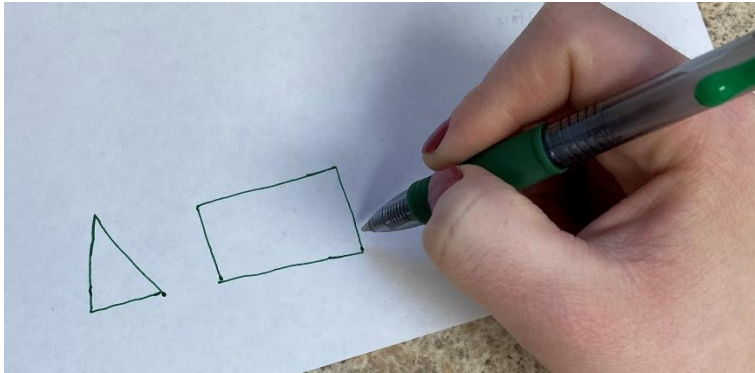


Figure 1: Refined fine motor skills. Use of tripod grasp to copy a triangle and rectangle

Strategies to help your child establish self-regulation skills:

- Practice taking 5 deep breaths together
- Do simple yoga poses
- Heavy work activities
- Hand squeezes

Figure 2: Begin to self-regulate

Things to say to help your child use feeling

words:

- “I feel hungry”
- “That movie made me feel scared”
- “I am smiling because I feel happy”
- “When something is hard, it makes me feel frustrated”

Figure 3: Use of feeling words increases



Additional Developmental Resources

If you want additional information on childhood development and milestones, check out the following resources:

Centers for Disease Control and Prevention

- CDC's Developmental Milestones: <https://www.cdc.gov/ncbddd/actearly/milestones/index.html>
- Learn the Signs. Act Early videos <https://www.youtube.com/playlist?list=PLvrp9iOILTQYqv7jf52JH4ANmTJ9S7HLP>
- CDC's Milestone Tracker App <https://www.cdc.gov/ncbddd/actearly/milestones-app.html>
- Free Materials <https://www.cdc.gov/ncbddd/actearly/resources.html>

Pathways

- Milestones <https://pathways.org/all-ages/milestones/#9>
- Videos <https://pathways.org/videos/>

Child Mind Institute

- Developmental Milestones <https://childmind.org/guide/parents-guide-to-developmental-milestones/>



SESSION III

Routines & Habits



Overview of Routines and Habits

What is a Routine?

Behaviors that are regular and repetitive that provide structure for daily life (AOTA, 2020).

Examples of Routines:

- Following a visual schedule to complete morning tasks (toileting, dressing, personal hygiene...)
- Consistently following a bedtime schedule

What is a Habit?

Behaviors performed somewhat automatically and are either helpful or hurtful to daily life (AOTA, 2020).

Examples of Habits:

- Eating a snack every day after school
- Biting your nails (hurtful habit)

Why are Routines and Habits Important?

Building helpful routines and habits can help your child to perform activities of daily living.

Consistently having “**sensory breaks**” throughout the day can help your child cope with sensory difficulties they may have.

By adding these sensory breaks into the routine, it will become a helpful habit overtime.

How Can I Improve Routine and Habits?

The key to building successful routines and habits is **consistency**.

This may be a trial-and-error process to find the right routine that works for your child, but once you find it, keeping a consistent routine will be helpful to develop the routines and habits.

A **visual schedule** might help your child understand and follow a routine consistently (See ‘Visual Schedules’ attached).



Visual Schedules

Directions:

The following pages have examples of visual schedules you can try with your child to help build a consistent schedule.

There are **different formats** of visual schedules you can try. Use the one that makes the most sense to you and your child.

There are pictures and words provided for a **morning routine, a nighttime routine, and a school day routine.**

There are “**sensory break**” strategies that can be incorporated into any of the three visual schedules.

Each picture and word on the following pages can be **cut on the dotted line and glued or Velcro to attach onto the box examples** in the order your child should complete each task. Tasks should be picked based on the routine your child is expected to do.

Using **Velcro** might be easier so that you can change the routine as needed.

This may be a **trial-and-error process** and finding the right routine can take time.

Talk with your child’s therapist to help you pick an order for each task, or have your child help you pick an order that would work best for them

You may find it helpful to create your own visual schedule. It may be helpful to **include real pictures of your own home and task materials** to help your child do each task.

If your child continues to struggle with specific tasks, you may need to **break each task into its own steps** to help your child sequence the task.



Pictures and Words to Cut Out for Morning or Nighttime Routine

Toilet



Brush
Teeth



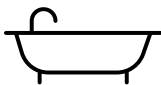
Brush
Hair



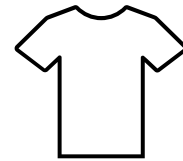
Breakfast



Bath



Get
Dressed



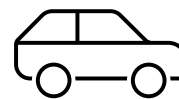
Shoes



Backpack



Car



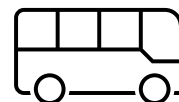
School



Playground



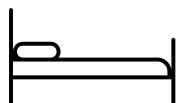
Bus



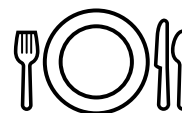
Exercise



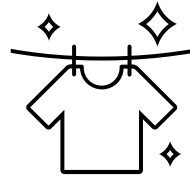
Bed



Dinner



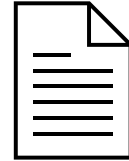
Pajamas



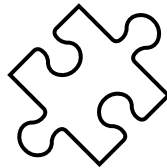
Story
Time



Home
work

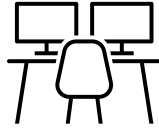


Game

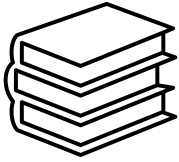


Pictures and Words to Cut Out for School Routine

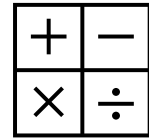
Desk



English
Class



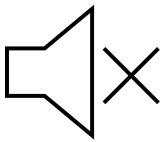
Math
Class



Science
Class



Quiet
Time



Story
Time



PE



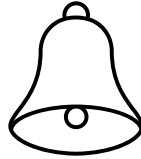
Lunch



Playground



Bell



Computer
Time



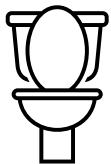
Art
Class



Music
Class



Bathroom



Wash
Hands



Pictures and Words for Sensory Breaks Throughout the Day

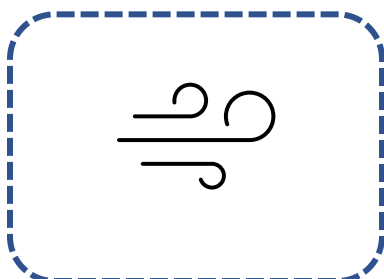
Heavy
Work



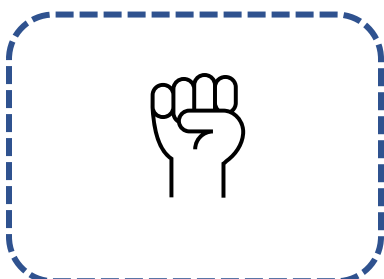
Yoga



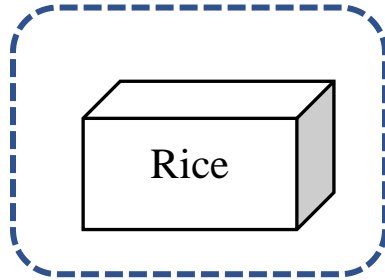
Deep
Breaths



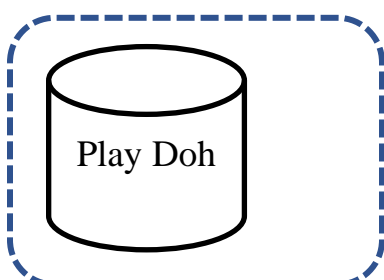
Hand
Squeezes



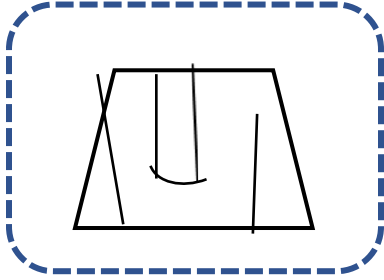
Sensory
Bin



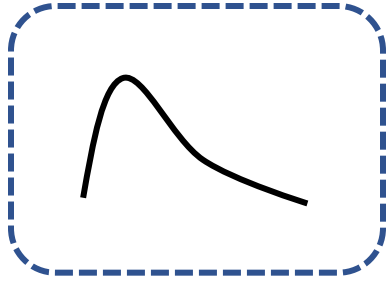
Play
Doh



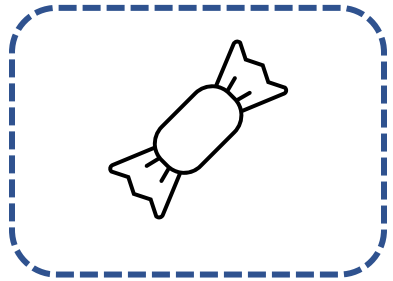
Swing



Slide



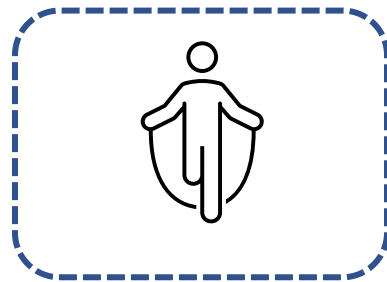
Chew Gum
or Hard
Candy



Obstacle
Course



Jump
Rope



Bike



Blow
Bubbles



Animal
Walks



Follow the
Leader



Playground



Dance



Blank Boxes to Put Your Own Words and Pictures



Visual Schedule #1

1

Glue/Velcro 'picture'
here

2

Glue/Velcro 'picture'
here

3

Glue/Velcro 'picture'
here

4

Glue/Velcro 'picture'
here

5

Glue/Velcro 'picture'
here

Visual Schedule #2

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here



Visual Schedule #3

1

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

2

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

3

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

4

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

5

Glue/Velcro 'word'
here

Glue/Velcro 'picture'
here

SESSION IV

Sensory Processing & Sleep



Sensory Processing and Sleep

What is Sleep and Why is it Important? **

Sleep is a natural state in which your body and brain rest and relax. Sleep prepares you for the next day and supports you to complete your daily tasks.

Sleep is a basic need. It is your body's way of taking care of itself, and it supports physical and mental health.

Poor sleep can lead to increased chances of becoming sick, poor emotional regulation (being grouchy or irritable), and decreases your ability to think clearly.

How Does Sensory Processing Difficulties Impact Sleep? **

Your child may be having disturbed sleep because of the way they take in and respond to the sensory information around them.

When any of the **8 sensory systems** are affected, it can interfere with your child's ability to fall asleep and stay asleep.

Examples: **

- Too dark or too light in the room
- Uncomfortable or “itchy” pajamas or sheets
- Distracting noises
- Unable to “calm down” or stop moving
- Difficulty with interoception (unable to recognize if they are tired)

What Can I do to Improve My Child's Sleep?

There are strategies you can try to help your child sleep better.

Each strategy listed on the following pages are suggestions and finding the right strategy for your child may be a **trial-and-error process**.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.

**Adapted from (Cordell, 2021; May-Benson & Spiral Foundation Interns, 2018)



Strategies to Help Your Child with Sleep

Establish Skills and Tolerance

- Develop a consistent bedtime routine (turn off screens, brush teeth, heavy work / deep proprioceptive input activity, read a bedtime story...)
- Do calming heavy work activities (animal walks to the bathroom, push a laundry basket...)
- Blow bubbles or do deep breathing exercises
- Yoga
- Meditation and mindfulness activities

Alter the Context

- Change the room your child sleeps in for better lighting or noise preferences

Modify the Context or Task

- Change the type / texture of pajamas or sheets (Lycra sheets)
- Put in 'black-out' curtains to make the room darker if lights bother your child
- Plug in a nightlight if your child does not like the dark
- Remove decorations or 'visual clutter' from your child's room
- Use a weighted blanket or lap pad
- Try essential oils (lavender)
- Turn on quiet white noise or calming music
- Have your child sleep with your T-shirt or pillowcase

Prevent Bad Experiences

- Avoid caffeine to prevent difficulty falling asleep
- Turn off screens 2 hours before bedtime
- Encourage lots of movement / heavy work throughout the day to prevent your child from feeling restless or full of energy at bedtime
- Avoid spinning (vestibular input) before bed

Create Opportunities

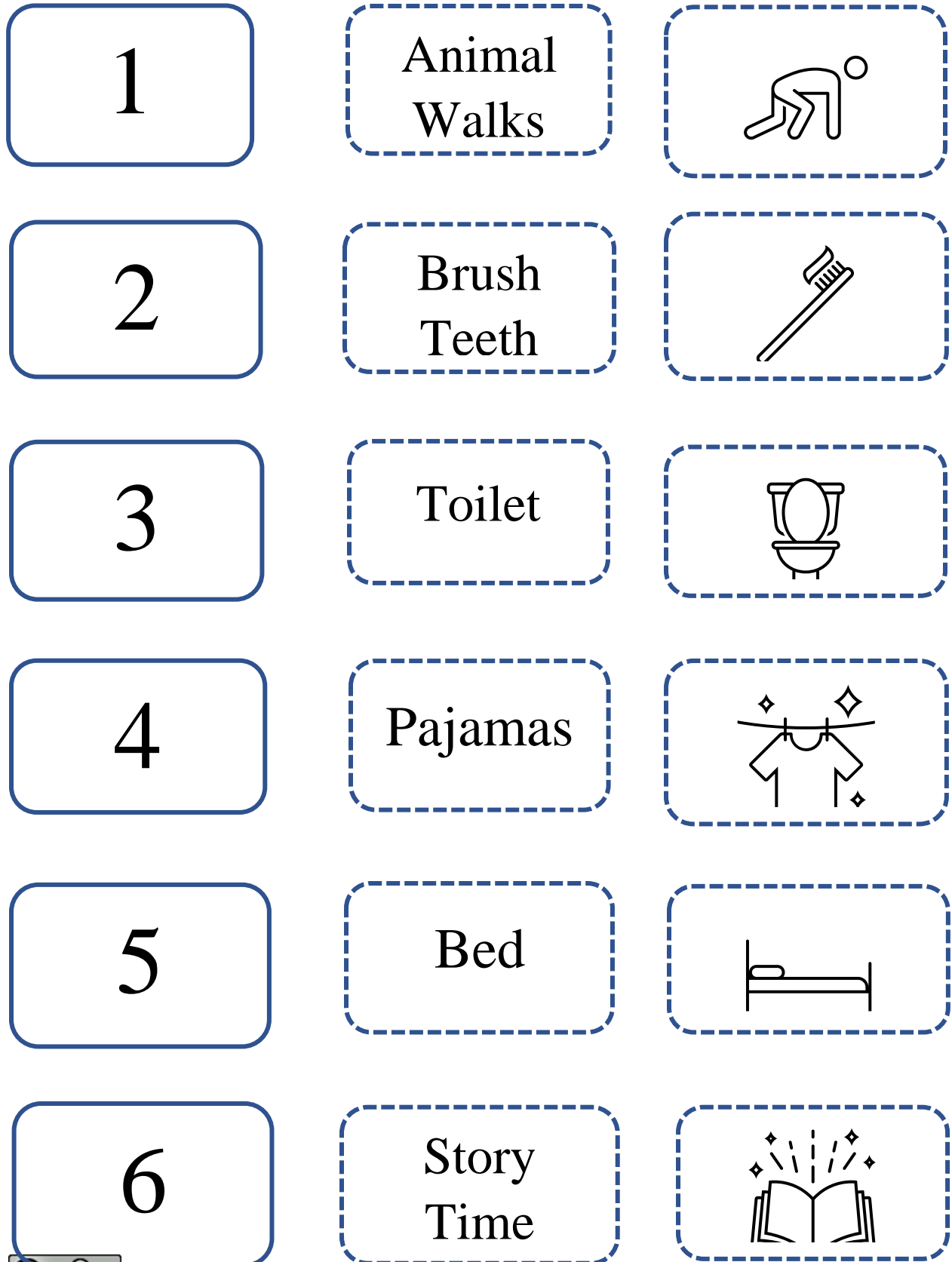
- Create a bedtime visual schedule (Figure 1)
- Create social stories about bedtime and sleep
- Create a bedtime checklist



Comments:



Figure 1: Example of a Bedtime Visual Schedule



Session V

Guide to Haircuts, Visual Schedule, Pictures of a Barbershop and Tools, Tips for Barbers and Stylists



Guide to Haircuts

Haircuts can be a stressful experience for any child, especially for children with sensory processing difficulties.

Getting a haircut may be a new experience, and there are many aspects involved that can make this experience stressful, including:

- Going to a new place
- Meeting new people
- Being touched by someone else
- Wearing a tight haircut cape
- Feeling stray hair on their skin
- Noises such as hair clippers and scissors
- New smells
- Expectation to sit still

This can be especially stressful for children if they do not know what to expect when getting a haircut.

There are strategies you can try to make the haircut experience less stressful and more positive for you, your child, and the barber.

Each strategy listed on the following pages are suggestions and finding the right strategy that helps your child best may be a trial-and-error process.

There are strategies listed to try **before** the haircut, **during** the haircut, and **after** the haircut.

Directions:

Check the box for each strategy you try. Fill in the blank box at the bottom of the page describing which strategy worked or did not work for your child.



Strategies to Prepare for a Haircut - Before

- Watch a YouTube video of a barbershop to help your child understand where they will be going and what will be happening
- Take your child to the barbershop a day before their appointment and allow them to walk through the space to help them know what to expect
- Show your child pictures (See '**Pictures of Barbershop and Tools That May be Used During a Haircut**' attached) of the materials and tools that will be used during the haircut
- Talk to your child through the haircutting process. Use a visual schedule (See '**Haircut Visual Schedule**' attached) to help them understand the steps
- Make a haircut appointment for your child to reduce the amount of time spent waiting for the haircut
- Ask the salon if you can schedule the appointment for a time when the salon is less busy
- Have your child practice touching their hair and scalp. Try to encourage them to let you touch their hair and scalp to help them get used to the feeling
- If your child has auditory sensitivities, ask the barber or stylist to use scissors instead of clippers to reduce the noise your child will hear during the haircut
- Do a heavy work activity or a calming activity right before going to the appointment (deep pressure massage to their scalp, jumping jacks, animal walks...)
- Talk with the barber or stylist about the sensory sensitivities your child has. If they are interested, give the barber or stylist the "**Barber & Stylist Tip Sheet**" to help them prepare for the experience

Strategies for During the Haircut

- Use the visual schedule to help your child follow the haircutting steps
- Talk with the barber or stylist about the sensory sensitivities your child has. If they are interested, give the barber or stylist the “**Barber & Stylist Tip Sheet**” to help them prepare for the experience
- Give your child a small sensory toy to help them have “quiet hands” during their haircut (pipe cleaner, stress rock...)
- Have your child wear noise blocking ear buds to help reduce the noise they hear
- Ask the barber or stylist to loosen the haircut cape so that it is not tight against your child’s neck
- Ask the barber or stylist not to use products with strong smells to reduce the scents your child smells
- If your child has auditory sensitivities, ask the barber or stylist to use scissors instead of clippers to reduce the noise your child will hear during the haircut
- Bring a weighted blanket or toy to place in your child’s lap
- Encourage your child to take deep breaths if they begin to feel overwhelmed

Strategies for After the Haircut

- Bring another shirt for your child to change into after the haircut
- Say positive comments about your child’s behavior/performance during the haircut (“You were so brave to get your hair cut today,” “You did an excellent job of taking deep breaths when you were feeling overwhelmed”)
- Do something to celebrate their successful haircut (Go out for ice cream, have a movie night, play their favorite game with them...)
- Talk about the things that overwhelmed your child when they were getting a haircut and brainstorm ways to make it better for next time

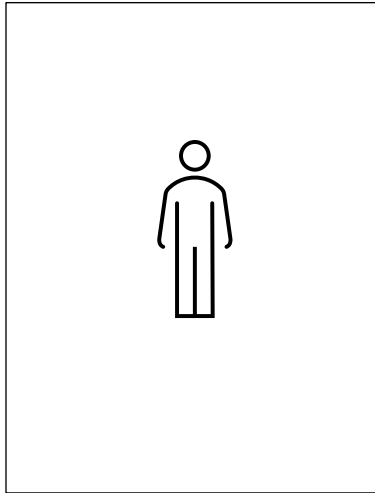
Comments:



Haircut Visual Schedule



1. Go to the Barbershop



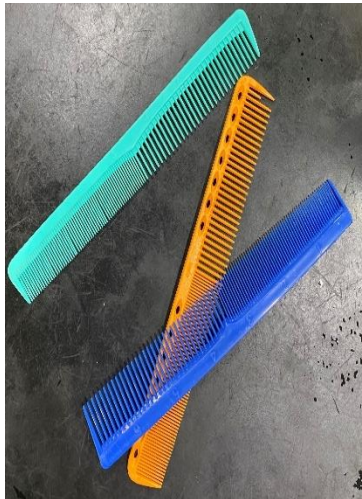
2. Meet the Barber



3. Sit in the chair



4. Put on a Cape



5. Comb hair



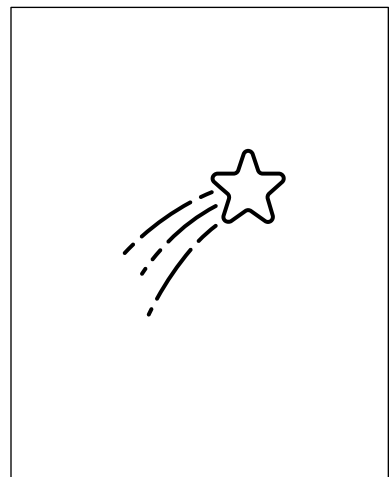
6. Cut or Trim hair



6. Cut or Trim hair



7. Brush hair off with a hair duster



8. All done! Good Job!

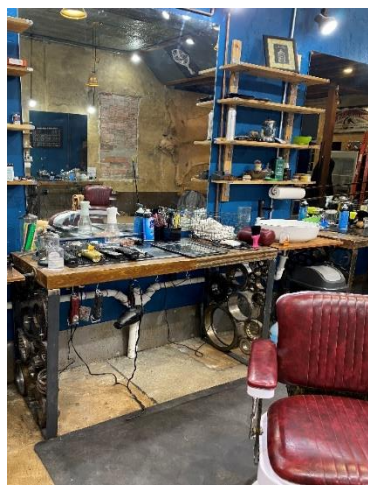
Pictures of a Barbershop and Tools That May be Used During a Haircut



Full Barbershop with 6 Chairs/Stations.



Front doors of the barbershop



Haircutting Station



Haircutting Chair



Chair with a scooter/booster seat



Haircutting Cape

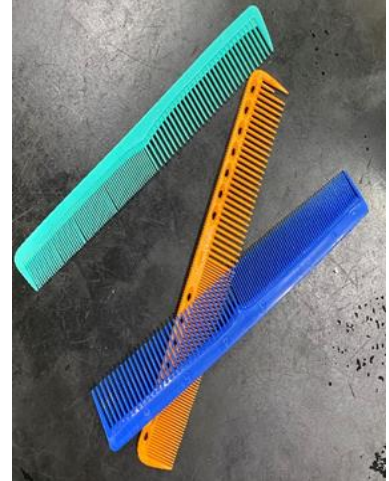




Hairbrush



Scissors



Combs



Hair Clippers



Hair Duster



Spray Bottle



Mirror



Hair Dryer



Hair Solution

Tips for Barbers & Stylists

Haircuts can be a stressful experience for any child, especially for children with sensory processing difficulties.

What is Sensory Processing?

Sensory processing is your brain's ability to take in sensory information from the 8 sensory systems and organize it to help you complete daily tasks.

There are **8 sensory systems**:

- Visual (sight)
- Auditory (hearing)
- Olfactory (smell)
- Gustatory (taste)
- Tactile (touch)
- Proprioception
- Vestibular
- Interoception

Each sensory system works together to help you do the things you need to do daily.

What are sensory processing difficulties?

Sensory processing difficulties happen when your brain is not able to use sensory information effectively.

For children with sensory processing difficulties, getting a haircut may be a new experience, and there are many aspects involved that can make this experience stressful, including:

- Going to a new place
- Meeting new people
- Being touched by someone else
- Wearing a tight haircut cape
- Feeling stray hair on their skin
- Noises such as hair clippers, scissors, and background music
- New smells
- Expectation to sit still

This can be especially stressful for children if they do not know what to expect when getting a haircut.



Giving a child with sensory processing difficulties a haircut can additionally be a stressful experience for you.

There are strategies you can try to make the haircut experience less stressful and more positive for you and your client.

The following strategies are suggestions to help you (the barber or stylist) to create a more positive and successful haircut experience for your client.

Tips & Strategies

- Ask the child or parent about the specific sensory difficulties the child may have
- Ask the child or parent if they have specific suggestions for you to try
- Use a firm touch instead of light touch when touching the child
- Eliminate steps to the haircut process, if appropriate (skip washing the hair, skip the blow dryer...)
- Try to use scent-free products or just water to reduce the scents the child smells
- Make sure the haircut cape is not too tight around the child's neck
- Use scissors instead of electric clippers to reduce the amount of noise the child hears
- Allow the child and their family to bring in items that will help the child get through the haircut (ear buds, a fidget toy, weighted blanket...). You may need to establish expectations/rules for the items
- If the client brings in a visual schedule, try to follow the steps outlined on that schedule as best you can
- Talk to the child to help prepare them for what is going to happen
- If appropriate, allow the child to feel the comb or tool you will be using to help them understand what the tool does



- Turn off background music to reduce the noise the child will hear, if appropriate
- Have the child do a heavy work or calming activity before sitting down or halfway through the appointment, if needed (jumping jacks, take 10 deep breaths, play a quick game of Simon Says...)
- Try to limit the movement of the chair/spinning. If possible, walk around to cut the child's hair to reduce the amount of movement the child experiences while sitting

SESSION VI

Sibling Support



Parents' Guide to Support Siblings

If you have a child with sensory processing difficulties, it can create challenges for the whole family.

One reason that makes it challenging is because sensory processing difficulties are not exactly obvious. Sensory processing difficulties are often seen as a behavior of some kind.

Examples:

- Your child may have a meltdown (yelling, screaming, or crying) from sensory overstimulation
- Running, crashing, or hitting because your child is seeking proprioceptive input
- Your child may be easily frustrated because of too much noise, light, or touch

Sensory processing difficulties can be difficult for siblings to understand and can make it hard for your children to bond.

Siblings may have many **emotions** that come with the sibling role. These emotions can be hard to understand and deal with for both you (the parent) and your child.

Examples of emotions:

- Anger
- Guilt
- Embarrassment
- Resentment

Tips to Promote Positive Sibling Relationships

- Talk to your child about their sibling's diagnosis/difficulties with sensory processing. Help them understand what is going on and why (Use the **Sibling Guide** to help start the conversation)
- Encourage all your children to participate in the “sensory breaks” or sensory strategies incorporated throughout the day
- Allow your children to express their feelings or emotions about their sibling without judgement. Help them recognize and deal with what they are feeling
- Try your best to share attention - make time for all your children. One way to do this is to plan an individual “date” with each of your children and do something special with them (go to the park, pick flowers, make a craft together...)
- Have family game nights and have your children be on the same team (parents vs. kids)
- Encourage your children to do activities of their own so that they have time apart from each other
- Be positive and role model positivity for your children
- Encourage your child to join a sibling support group (Figure 1)
- Read social stories or books to your child to help them understand their sibling better (Figure 2)

Figure 1: Available Sibling Support Groups

- Sibling Leadership Network: <https://siblingleadership.org/>
- Siblings with a Mission: Sibling Support Groups
<http://www.siblingswithamission.org/sibling-support-groups.html>
- For Teenage Siblings Only: Facebook support group
<https://www.facebook.com/groups/SibTeen/>
- For Adult Siblings Only: Facebook support group
<https://www.facebook.com/groups/SibNet/>
- ASPEN Support Group in Gillette, Wyoming <https://aspennj.org/aspennj.org/chapters/family-issues-chapters/gillette-wyoming>
- Family Resource Associates Sibling Support Groups
https://www.frainc.org/services_programs/sibling-support-groups.html



Figure 2: Social Stories, Books, and Resources

Books and Resources for Young Siblings:

- Views from Our Shoes: Growing up with a Brother or Sister with Special Needs* by Donald Joseph Meyer.
- My Brother Charlie* by Holly Peete
- ¡Luna, Yes! /Luna, ¡Si!* by Jessica Gonzalez
- Billy’s Sister: Life When Your Sibling Has a Disability* by Jessica Leving
- Sensory Seeking Sloth* by Jennifer Jones
- The Kids’ Guide to Staying Awesome and In Control* by Lauren Brukner
- My Great Big Feelings* by C. M. Tolentino
- Don’t Rush Me* by Chynna Laird
- The Sibling Experience PDF: https://autism.sesamestreet.org/wp-content/uploads/2015/08/SiblingGuide.pdf?utm_source=autism&utm_medium=email&utm_campaign=2019_0514_Autism_Siblings&utm_content=card2-title
- Young Siblings Guide: *Autism, My Sibling, and Me*
<https://researchautism.org/resources/autism-my-sibling-and-me/>

Resources for Teenage Siblings:

- Helping Siblings Manage Embarrassment:
<https://www.sheknows.com/parenting/articles/1028265/my-sibling-with-disabilities-embarrasses-me/>
- Teenage Siblings Guide: *Life as an Autism Sibling: A Guide for Teens*
<https://researchautism.org/resources/life-as-an-autism-sibling-a-guide-for-teens/>



Books and Resources for Parents and Grandparents:

- Parent Sibling Guide: *Brothers, Sisters, and Autism: A Parent's Guide to Supporting Siblings* <https://researchautism.org/resources/brothers-sisters-and-autism-a-parents-guide/>
- A Parent's Guide to Helping Siblings Cope <https://siblingleadership.org/wp-content/uploads/2019/04/3-Helping-Siblings-Cope.pdf>
- Understanding Your Child's Sensory Signals* by Angie Voss
- Understanding Your Baby's Sensory Signals* by Angie Voss
- Sensory Processing Disorder Parent Support Facebook page <https://www.facebook.com/sensoryprocessingdisorderparentsupport>
- Sensory Processing Disorder Parent Support website page <https://sensoryprocessingdisorderparentsupport.com/>
- Facebook Grandparent Support Group <https://www.facebook.com/groups/GrandparentsOfKidsWithSpecialNeeds/>



Sibling Guide

Your sibling may be a little bit different than other kids, and that is okay.

Your brother or sister may cover their ears when there are loud sounds, play a little bit too rough, or become upset if you touch them.

They do this because their body does not react to things the same way that your body does.

The sounds that make your sibling cover their ears may not seem loud to you, but it may be extremely loud to your brother or sister's ears. This loudness can make them upset or distracted.

The tags and seams on your clothes that you don't seem to feel, may feel sharp or painful to your sibling. This feeling can be upsetting to them.

This can happen with all the senses: **Sight, sounds, taste, touch, smell, and movement.** Your sibling may react differently than you with any of these senses.

It can be difficult to understand why your sibling is the way they are, and it is normal to sometimes feel upset, angry, or embarrassed toward your sibling.

When you feel upset with your sibling, try:

- Take 5 deep breaths
- Talk with your parent
- Read a book
- Ask for alone time
- Go for a walk or play outside
- Ask your sibling to be on your team
- Ask your sibling to explain what they are feeling
- Tell your sibling if they are playing too rough
- Do the "sensory breaks" with your sibling
- Build an obstacle course together



SESSION VII

Parent Self-Care



Parent Self-Care

As a parent, it is your job to take care of your kids and make sure they have everything they need. **You are working hard, and you are doing great!**

It is also your job to take care of yourself. Taking time to do **self-care** can often create feelings of guilt for parents, especially if you feel like there are a million things to do.

Self-care is NOT selfish. Self-care helps you and your family stay happy and healthy.

Self-care is important for your role as a parent and is important for the health of your whole family.

Practicing self-care strategies that help you feel **energized, positive, and refreshed** is a great way to **role model** for your children how to take care of themselves.

Self-care can look many ways and finding strategies that work best for you and your family may be a **trial-and-error process**.

Tips to Overcome the Feeling of Guilt When Practicing Self-Care

- Talk to your kids about the importance of self-care
- Teach your kids how to do their own type of self-care activities (deep breaths, yoga, color...)
- Remind yourself that self-care is important for the whole family. You are not being selfish
- Schedule time for self-care
- Have your kids join your self-care activities occasionally

Self-Care Ideas to Try

- Take time to mediate, practice mindfulness, or take deep breaths
- Go for a walk outside
- Exercise or yoga
- Utilize respite care
- Join a parent support group (See ‘Available Parent Resources and Support Groups’ below)
- Explore your own interests or hobbies
- Journal
- Get off social media
- Go on a date
- Have coffee with a friend
- Talk to a counselor or other professional

Available Parent Resources and Support Groups

- Sensory Processing Disorder Parent Support Facebook page
<https://www.facebook.com/sensoryprocessingdisorderparentsupport>
- Sensory Processing Disorder Parent Support website page
<https://sensoryprocessingdisorderparentsupport.com/>
- Facebook Grandparent Support Group
<https://www.facebook.com/groups/GrandparentsOfKidsWithSpecialNeeds>
- From Crazy to Calm – Parent Support/Course (8-week)
<https://www.sensorymom.com/crazy-calm-registration/>
- Sensational Kids Facebook page
<https://www.facebook.com/sensationalkidswyoming>
- Virtual Parent Support Group – hosted by Sensational Kids. View the Sensational Kids Facebook page for upcoming dates and times
- Advanced Certification DIR/Floortime, Parent Coaching. Services available at Sensational Kids



SESSION VIII
Outline of a Virtual Parent Support Group



Virtual Parent Support Group Outline

The following steps are provided for a practitioner to **START** a local and **virtual** parent support group for the parents of children with special needs or sensory processing difficulties.

This support group could be hosted for one clinic, or for multiple clinics at one time.

There are not many (**if any**) parent support groups specifically for sensory processing difficulties located in the communities of Wyoming. Once the support group is established within the clinic, it may be beneficial to consider marketing the virtual support group throughout the community to reach a larger parent/caregiver population.

Overall, the purpose of this support group should be to provide parents and caregivers with a safe and comfortable environment to share their thoughts, feelings, ups, and downs of raising a child with sensory processing difficulties. This group should offer parents a sense of support, comfort, and strategies to help them navigate their role as a parent of a child with sensory difficulties.

To Begin the Virtual Parent Support Group for Sensory Processing Difficulties:

1. Sign up for a Zoom account <https://zoom.us/>. If you already have an account, log in.
2. Create a Zoom Meeting: Click on “Schedule a meeting”
3. Type in the Title of the support group in the topic box (Example: Virtual Parent Support Group)
4. Add a description of the group (Optional)
5. Put in the Date and Time the group will occur.
6. Select a duration and time zone for the meeting
7. Click on the “recurring meeting” check box to be able to use the same zoom link for each meeting
8. If you click on the “passcode” checkbox, the group members will then need to type in the access code to enter the zoom meeting
9. The “waiting room” checkbox will require the zoom creator to accept participants as they log on. This feature can be turned on or off, depending on the host’s preference.



Strategies to Help Selecting a Time / Day / Frequency for Your Support Group:

1. Personally ask each of your client's parents if they are interested in a support group, and if yes, what time and day would they most likely be able to attend and how often would they prefer to join.
 - a. Keep track of each parent's answer, and then decide based on the responses.
2. Hand-out a survey asking:
 - a. Are you interested in an online parent support group? (yes/no)
 - b. What day of the week would best allow you to attend the group? (Wednesday, Thursday, Friday, Saturday)
 - c. What time of the day would work best for you? (Morning, Afternoon, Evening)
 - d. How often would you prefer to have a group? (Once a month, twice a month)
3. Create a Facebook (social media) poll asking about interest, time, day, and frequency that would work best.
 - a. This will automatically calculate the most popular answer to help you determine.
 - b. Example poll questions under #2:
4. Create a Facebook post encouraging followers to answer these questions in the comments.

Once a date and time have been determined, you need to market the group to gain participants.

Marketing suggestions:

1. Tell each family about the group, the date, and time of the group during their individual appointments. Handout a flyer or sheet of paper with the information on it.
2. Put up a sign-up sheet asking for a first name and email address in the waiting room for parents to sign-up for the group.
3. Send an email reminder with the group zoom link to parents who signed up for the group.
4. Create a Facebook post with the details of the group.
5. If you want to expand the group, you could put an advertisement in the local newspaper, call other clinics in town, and advertise on social media platforms.



It will be helpful to provide potential group participants with a “Zoom Tutorial” handout, or a link to help them log onto the zoom meeting.

This link may be helpful to learn how to join a zoom meeting: <https://learn-zoom.us/show-me>

Next, as the host of the group meeting, it will be helpful to plan an outline for the group and establish group rules.

This is just a suggested format. Overtime, it may be beneficial if the group is **more parent-led** to allow for greater freedom and flexibility for the group dynamic. However, this type of group may take time to form, and more structure for the first couple of sessions may be necessary to allow for smooth transitions throughout the session. Additionally, group expectations need to be established to promote participation, allow group members to get to know each other, and to help develop relationships and networks of support for parents.

Example of a Group Outline Following some of Cole’s Seven Step Format (Cole, 2018):

1. Introduction:

- a. Introduce yourself and the name of the group
- b. Have each member introduce themselves
- c. Explain the purpose of the group
- d. Establish group rules and expectations (Be kind, this is an open and judgement free zone, mute your microphone while others are talking, parent-led discussion...)
- e. Do a warm-up activity of some kind (casual conversation, mindfulness activity...). This will help the members to get to know each other and will help members feel more relaxed and willing to participate in the group.

2. Activity

- a. It may be helpful to plan an activity for the first couple of sessions.
- b. The activity can be as formal or informal as you want.
- c. The activity should be something that would open the door for participants to have an in-depth conversation after completing the activity
 - i. Example of an activity: Type open-ended questions on a word document and share your screen for members to see. Have



members write their answers on a piece of paper. Inform members that they will share their answers when everyone is done. (Example questions: “I am struggling with _____,” “I don’t understand why my child _____”, “Does anyone have suggestions about/for _____?”).

3. Sharing & Processing

- a. Invite participants to share and freely discuss their answers.
- b. *As the host* Make sure each member’s contribution to the conversation is acknowledged
- c. Invite members to ask each other questions, talk freely, and share their emotions and opinions with each other.

4. Generalization and Application

- a. In this step, you will guide the group to reflect on and discuss things that they learned during the meeting
- b. You will also guide them to think about and discuss how they can apply some of the concepts they learned in their life

5. Summary

- a. The last aspect of the group is a conclusion.
- b. This can include a concluding summary highlighting the main topics discussed throughout the meeting.
- c. This would be a time to either remind members of the next schedule meeting, or as a group, establish a time to meet next.
- d. Thank all members for attending and contributing to the support group.

Having some sort of plan or outline for each session would ensure that each group session runs smoothly to create an environment that is supportive and comfortable for parents and caregivers to attend.

Virtual Parent Support Group



What is it?

A parent support group will be hosted virtually, via **Zoom**, for parents and caregivers of children with special needs.

(*Insert clinic name*) will host this virtual event. **Everyone welcome.**

It will be a place to connect with other parents, share stories and experiences, offer help to others, and develop a local network of support.

When is it?

The first parent support group is scheduled for **Tuesday March 22, 2022, at 6:30 PM.**

How do I attend?

Write your name and email address on the sign-up sheet to receive an email with the zoom link.

Or go to the Facebook page (*insert link to Facebook page*)

What does it cost?

This parent support group will not cost anything to join.

You will need a computer or smartphone with the free zoom app and internet access to join the group.

We look forward to connecting with you on **Tuesday March 22, 2022, at 6:30 PM** and developing a local support network.



Evaluation Plan: Pre-survey & Post-survey



Product Evaluation Plan

A pre- and post-survey has been created to evaluate both the needs of the population (pre-survey) and evaluate the effectiveness of the product materials (post-survey).

Pre-survey to Identify Needs

To assist with identifying needs, a pre-survey has been developed for practitioners to use during the initial evaluation process with every new client. This concise survey will help gain a better understanding of the parent, grandparent, and/or caregivers' perception about their knowledge regarding sensory processing and sensory strategies. The survey additionally aids with objectively identifying educational topics that are of interest to the client. The full survey can be found on the following page.

Post-survey to Determine Effectiveness

Additionally, a post-survey has been created to measure the effectiveness of the educational materials and resources. The post-survey contains two Likert-scale questions from the pre-survey to determine how the product impacted parents' perceived knowledge. Three additional Likert-scale questions and two open-ended questions are included in the post-survey to gather the subjective perspective of the effectiveness of the instructional materials (i.e., handouts and videos). This post-survey is intended to be distributed after the clients have received the educational



topics and instructional materials relevant to them. The full survey can be found on the following pages. Lastly, a post survey has been created for staff to complete upon completion and implementation of the product itself. This survey is intended to measure the extent to which the product met its established goals and objectives. This survey can be found after the parent post-survey and is labeled 'Post-Practitioner Survey'.



Pre-survey



Name: _____

Check one: I am a: Parent Grandparent Caregiver

Please circle your level of agreement with each statement below.

“I feel knowledgeable about sensory processing”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

“I feel like I understand how to use sensory strategies at home for my child”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Check all that apply:

I would like more information about:

- My child’s specific diagnosis: _____
- Sensory processing difficulties
- How sensory processing affects daily life
- Fine motor development
- Gross motor development
- Social and cognitive development
- Sensory strategies to help at home
- Sensory strategies to help at school
- Routines and habits
- Parent support groups
- How to support siblings
- Haircutting tips
- Sleep
- Other: _____



Post-survey



Name: _____

Check one: I am a: Parent Grandparent Caregiver

Please circle your level of agreement with each statement below.

“I feel knowledgeable about sensory processing”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

“I feel like I understand how to use sensory strategies at home for my child”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

“I learned a lot from the videos”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

“The hand-outs were valuable to me”

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree



Check all that apply:

I feel like I have gained more knowledge about my child in the following areas:

- My child's specific diagnosis: _____
- Sensory processing difficulties
- How sensory processing affects daily life
- Fine motor development
- Gross motor development
- Social and cognitive development
- Sensory strategies to help at home
- Sensory strategies to help at school
- Routines and habits
- Parent support groups
- How to support siblings
- Haircutting tips
- Sleep
- Other: _____

Please describe what you found to be the most helpful from the handouts, videos, and/or attendance in the virtual parent support group:

Please describe any successes you have had since getting more information about sensory processing:



Practitioner Survey

Please circle your level of agreement with each statement below regarding the *Parent & Caregiver Education and Support: A Product to Support Families of Children with Sensory Processing Difficulties*.

Staff members have the resources they need to conduct individualized parent education, specific to the sensory needs of the child.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Upon implementation of the product materials, parents and caregivers will demonstrate increased perception of knowledge regarding sensory processing difficulties and sensory strategies to use across contexts.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

The product includes multiple instructional methods to target a variety of learning styles.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

The product reflects the needs of the population and individual clients.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Literacy levels of the population were considered and accounted for to promote user inclusion, readability, and usability.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree



I personally intend to use and distribute the educational materials in this product.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

I believe the product will be effective in education parents, grandparents, and caregivers of the clients served.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree



Marketing Plan



Marketing Plan

Marketing to practitioners and other clinics:

1. A 'Practitioner Instructions' page has been created to help guide practitioners to use the educational materials and resources successfully and appropriately.
2. A supplemental video has been created to explain to practitioners how to use and implement this product.
3. The product handouts and written materials will be provided to each practitioner for them to use and handout with their clients.
4. Supplemental videos will be posted to the Site's website and/or the social media platforms.

Marketing to promote services provided:

1. All written materials and videos can be utilized to market the services provided at the clinic. These educational materials can be posted to the website or created into social media posts.

Marketing to promote the Occupational Therapy profession:

1. April is Occupational Therapy Month. Both the written materials and videos can be used to celebrate and promote the profession of occupational therapy.



Marketing the Virtual Parent Support Group:

1. Tell each family about the group, the date, and time of the group during their individual therapy appointments. Handout a flyer or sheet of paper with the group information on it.
2. Create a Facebook post with the details of the group.
3. If you want to expand the group, you could put an advertisement in the local newspaper, call other clinics in town, and advertise on social media platforms.
4. Word of mouth: encourage the group participants to “tell a friend to tell a friend.”
5. Create a page on the website specifically for the parent support group and post all information about the group (date, time, frequency, zoom link to attend...).
6. Testimonials from parents who have attended the support group in the past.



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