2006

Sensory Processing: A Guide for Parents and Community Professionals

Julie Yutrzenka

University of North Dakota

Follow this and additional works at: https://commons.und.edu/ot-grad

Part of the Occupational Therapy Commons

Recommended Citation

https://commons.und.edu/ot-grad/323

This Scholarly Project is brought to you for free and open access by the Department of Occupational Therapy at UND Scholarly Commons. It has been accepted for inclusion in Occupational Therapy Capstones by an authorized administrator of UND Scholarly Commons. For more information, please contact zeineb.yousif@library.und.edu.
SENSORY PROCESSING: A GUIDE FOR PARENTS
AND COMMUNITY PROFESSIONALS

By

Julie Yutrzenka

Advisor: Debra Byram, MA, OTR

A Scholarly Project
Submitted to the Occupational Therapy Department
of the
University of North Dakota
In partial fulfillment of the requirements
for the degree of
Master's of Occupational Therapy

Grand Forks, North Dakota
August 4, 2006
This Scholarly Project Paper, submitted by Julie Yutrzenka in partial fulfillment of the requirement for the Degree of Master's of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

[Signature]
Faculty Advisor

[Date] July 25, 2006
PERMISSION

Title  Sensory Processing: A Guide for Parents and Community Professionals

Department  Occupational Therapy

Degree  Master's of Occupational Therapy

In presenting this Scholarly Project/Independent Study in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the Department of Occupational Therapy shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my work or, in her absence, by the Chairperson of the Department. It is understood that any copying or publication or other use of this Scholarly Project/Independent Study or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given me and the University of North Dakota in any scholarly use which may be made of any material in our Scholarly Project/Independent Study Report.

Signature: [Signature]  Date: 7.25.06
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. REVIEW OF LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>III. and IV. METHODOLOGY and PRODUCT</td>
<td>23</td>
</tr>
<tr>
<td>V. SUMMARY</td>
<td>27</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>33</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>60</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

The author wishes to thank Deb Byram, MA, OTR for her feedback and support in the project process. I would also like to acknowledge the many families I've worked with over the years who have taught me to listen, and to support the spirit of their child in their search for success and independence in everyday life.
ABSTRACT

Miller (2006) describes sensory processing as the way the nervous system receives sensory messages, processes the information, and responds to it. Sensory Processing Disorder is the inability to effectively process information received through the senses. This includes sensory information received through the five traditional senses of vision, hearing, touch, taste, and smell. It also includes information from the vestibular (movement) and the proprioceptive (muscle sense). Sensory Processing Disorder affects 1 in 20 children (Miller, 2006).

Difficulties with sensory processing can negatively affect a child's participation in the daily occupations of play, learning, activities of daily living, and social interaction. Occupational therapists can assist children to engage in daily life activities that they find meaningful and purposeful (O.T. Practice Framework, 2002). For the child with sensory processing difficulties, this includes daily occupations of play, learning, leisure, social participation, activities of daily living and work. Through the process of
family centered care, occupational therapists also address the habits, routines, and roles that children use to carry out their daily activities.

Parents of preschool and/or elementary aged children may need help recognizing the symptoms of Sensory Processing Disorder. They may also need help accessing occupational therapy resources such as referral and home program information. Community service professionals such as Early Childhood Family Education staff, nurses, social workers, and daycare providers have direct contact with children and families, and can also assist in the early referral of children with suspected sensory processing needs.

The focus of this project is to develop a set of booklets which can be utilized by parents and community professionals to access referral and resource information for the child with suspected sensory processing needs. Appendix A focuses on sensory processing information for parents including symptoms of sensory processing difficulties, the role of occupational therapy, and referral information. Appendix B targets information to community professionals, and also includes a research summary on sensory processing disorders. Appendix C contains sensory
processing resource information that can be utilized by both parents and community professionals.
CHAPTER I

INTRODUCTION

Sensory Processing Disorder is the inability to successfully process information received through the senses. This includes the sensory information received from the traditional senses of vision, hearing, touch, taste, and smell. It also includes sensations from vestibular (movement) and the proprioceptive (muscle sense). Sensory processing is a process that includes taking in information, processing the information, and responding to it. Difficulties with sensory processing can negatively affect a child's participation in the daily occupations of play, learning, activities of daily living, and social interaction (Dunn, 2001).

Miller (2006) reports that Sensory Processing Disorder affects 1 in 20 children. Dunn (2001) has documented four sensory processing preferences that can be identified through use of the Sensory Profile checklists with parents and caregivers. Legislation is also in place that supports the early identification of learning needs, and the provision of family centered intervention in the natural home and school.
setting (Edwards, Millard, Praskac, & Wisniewski, 2003). Literature cited in chapter II supports the model of family centered care in early intervention (Edwards, et al., 2003) and the role of the occupational therapist on collaborating with families and children to improve the child's independence in daily occupational routines (Dunbar, 1998). Gaps in the literature include best practice methods for sharing educational information on Sensory Processing Disorders with parents, caregivers, and professionals from the community as a whole. The Ecological Model of Human Performance provides the framework for considering how the interaction with the environment affects the behavior and performance of the child with suspected sensory processing needs. (Brown, Dunn, & McGuigan, 1994). Parents of preschool and/or elementary aged children may need help recognizing the symptoms of Sensory Processing Disorder. They may also need help accessing occupational therapy resources such as referral and home program information. The focus of this project is to develop a set of booklets which can be utilized by parents and community professionals to access referral and resource information for the child with suspected sensory processing needs.
Chapter II contains the literature review. The literature review is organized to define the role of Occupational Therapy with children ages birth to grade 3, and includes a historical review of legislation that guides occupational therapy intervention with the targeted population. Literature is analyzed that explores the concept of sensory processing, and the impact of sensory processing on a child's participation and independence in home, school, and community settings. The parameters of the literature review include exploring the process of family centered early intervention and the effectiveness of O.T. in the referral and intervention process for children with suspected sensory processing difficulties. It also explores options for making information on sensory processing needs accessible to the general public, including the methods and scope of information available. The literature review supports the need for materials to assist in the O.T. referral and intervention process for children with suspected sensory processing needs.

Chapter III and Chapter IV are combined to outline the methodology used to design the product. It also contains the
product, which is presented in three phases. The product contains written information and resource information that can be accessed by parents and community professionals.
CHAPTER II

LITERATURE REVIEW

Occupational therapy can be defined as "assisting people to engage in daily life activities that they find meaningful and purposeful." (O.T. Practice Framework, 2002). For the occupational therapist providing early intervention or school aged services, this may include a child's performance in any or all of the occupational areas of activities of daily living such as dressing, eating, and personal hygiene; education, play, leisure, and social participation, and work. Occupational therapists also address the habits, routines, and roles that children use to carry out their daily life activities. Occupational therapy evaluation and intervention consider the child's unique performance skills and patterns, the demands of the activity, and the context in which the activity is completed, in order to determine what is assisting or hindering the child's occupational performance.

Pediatric occupational therapy services may be provided in several settings using several different models, including a medical based model,
educationally based model, or a community based model. For the purposes of this project, educationally based occupational therapy services which may be provided in the home/community or school system setting will be the primary emphasis.

Occupational therapy helps children who have disabilities from birth to 21 years of age to benefit from educational programs. Programs may be home based in the birth to 3 year old population, and provided in a center or school based setting after age 3. Occupational therapy evaluation and intervention is focused on facilitating the child's participation in daily life activities or occupations. This may include the student's performance in the areas fine motor skills, eating, self-care, social skills, and play/leisure skills. Services may include assessment to determine strengths/needs; collaborating with parents and school staff on environmental or material adaptations; and developing intervention strategies to enhance performance in daily life activities. (American Occupational Therapy Association, 2004).

Historically, several pieces of legislation provide the basis for Occupational Therapy services in early intervention and with the school aged child. Part C of IDEA or the Individuals with Disabilities Education
Act addresses services for children ages birth to age 3. (Dunn, 2000).

Part C allows occupational therapists to provide services to infants and toddlers with diagnoses of physical or mental conditions, with developmental delays, or those who are at risk for having a developmental delay. To meet the requirements of IDEA, services must be developed through collaboration with the child's family or caregivers, education, and community agencies such as Head Start, Social Services, or Public Health.

Clark, Jackson, & Polichino (2004) provide specific examples of occupational therapy services for each of the five areas of development specified in Part C of IDEA. For physical development this includes promoting exploration of the environment, use of hands, use of technology to enhance interaction with the environment, training caregivers in positioning and handling techniques, and assisting the child to tolerate and use sensory information to participate in daily life tasks.

Cognitive and communication areas include introducing activities that promote attention to task and promoting skills for listening and following directions. In the area of social-emotional development occupational therapy may assist the child in developing self-regulation and play skills and promoting positive interaction with peers and adults. In the adaptive
area, occupational therapy intervention may include helping the child to develop skills in the areas of eating, drinking, dressing, grooming, and parent education on modifications that may be needed.

In the school system, school age children age 3 through age 21 are served under IDEA Part B. Part B identifies 10 disability categories including mental retardation, hearing impairments, speech or language impairments, visual impairments, serious emotional disturbance, autism, traumatic brain injury, other health impaired, and specific learning disabilities. Under Part B of IDEA, Occupational therapy is a related service which can only be provided to those students who meet eligibility criteria for one of the ten disability categories, and when it is determined that OT services are needed for the student to meet their educational goals. Occupational therapy evaluation may be used to identify what may be interfering with the student's learning and participation in daily school routines. The final legislation that allows for provision of OT services in the educational setting is Section 504 of the Rehabilitation Act of 1973. Children with certain disabilities who do not qualify for services under IDEA may qualify for accommodations under
Section 504. Examples include children with conditions such as conduct disorder, attention deficit disorder, or depression. Clark et al. (2004).

Sensory processing is the ability to take in information through the senses, to make sense of that information, and to respond to it. This includes senses of touch, movement, smell, taste, vision, hearing, and proprioception (the awareness of our position in space). When one of these senses is not working effectively, it can result in difficulties in the child's learning, motor development, or behavior (Kranowitz & Szklut 2001). This may include coordination problems, delays in academic achievement or activities of daily living, organizational skills, self concept, and over or underresponsivity to the sensations going on around them. A. Jean Ayres was the first to describe the clinical signs of sensory integration dysfunction in children with developmental issues in the 1970s. She described behaviors in children that resulted from poor integration of the senses of movement, sight, sound, taste, smell, touch, and proprioceptive sense. She was also the first to identify related problems with muscle tone, perception, and motor planning (Ayres, 1979).

There is controversy concerning what term to use to describe the child's difficulty in processing information received through the senses.
Kranowitz (1998) and Ayres (1979) use the term Sensory Integration Dysfunction, while Miller (2006) proposes that the new term Sensory Processing Disorder (SPD) be used by the therapeutic community to describe what was formerly known as Dysfunction of Sensory Integration. SPD or Sensory Processing Disorder is an umbrella term which can include children with Sensory Modulation Disorder, Sensory Discrimination Disorder, and Sensory-Based Motor Disorder. For the purposes of this project, the term Sensory Processing Disorder will be used to identify those children who have suspected difficulties taking in, interpreting, and responding to the sensory input in their everyday lives.

Dunn (2001) hypothesizes in her Model of Sensory Processing that people demonstrate four sensory processing patterns: sensory seeking, sensory avoiding, sensory sensitivity, and low registration. Dunn also suggests that a person's sensory processing preferences reflect their own nervous system needs, and are based on individual neurological thresholds and self-regulation strategies. Dunn, McIntosh, Miller, and Shyu (1999) also found distinct patterns of noticing and habituation that support the four categories of sensory processing proposed by Dunn.

Additional work by Brown, Cromwell, Dunn, Filion, and Tollefson (2001)
used skin conductance measures in adults that yielded distinct patterns of physiological responses that support Dunn's four quadrant model. These studies suggest that individuals are unique in the way that each of us take in sensation, and how we respond to it in our daily lives. When considering Dunn's Model of Sensory Processing, understanding an individual's sensory processing pattern is a key factor in designing effective interventions to assist children in participation and independence in their daily life routines.

Dunn (2001) also hypothesizes that an individual's sensory processing patterns are relatively stable across the lifespan, and are a reflection of an individual's preferences and personality. The use of a Sensory Profile questionnaire for person's birth to 90 years of age helps determine a person's individual pattern of preferences.

There are three Sensory Profile questionnaires that are utilized including the Infant/Toddler Sensory Profile for children ages 7 months to 36 months, the Sensory Profile for children ages 3 to 10 years of age and the Adolescent/Adult Sensory Profile which begins at age 11. The occupational therapist can analyze results to gain information on a child's
sensory processing patterns, and determine ways to improve their participation and independence in their daily life activities.

Prevalence rates of sensory processing disorders based on clinical experience have ranged from 5% to 10% for children without disabilities (Ayres, 1979). In a study by Ahn, McIntosh, Milberger, and Miller (2004), prevalence rates of sensory processing disorders among kindergarten students was 5.3% of the total Kindergarten enrollment, based on parental perceptions. The rate increased to 13.7% if the assumption is made that nonrespondents' rates were equivalent to respondents' rates. Based on the conservative 5.3% rate, over 220,000 kindergarten children in the United States may be affected by sensory processing disorders (Ahn, et al. 2004). The authors note that prior to this study, no prospective data has been published on the rate of sensory processing disorders in a typically developing population. The prevalence of this disorder suggests the need for information to educate parents and community professionals about the signs and symptoms of sensory processing disorder, including referral and intervention information.

When a child is referred for a special education evaluation, initial referral concerns help identify if the occupational therapist will be
involved in the evaluation. One of the areas that might be considered in the O.T. referral process includes the impact of sensory processing on the child’s daily occupations of play, learning, activities of daily living, and social interaction.

Children can be referred for an occupational therapy evaluation by a parent, teacher, or other service provider. Professional literature in occupational therapy identifies the signs and symptoms of sensory processing difficulties, and the process of referral. (Aquilla, Sutton, & Yack, 1998; Clark et al., 2004; Kranowitz, 1998). Gaps in the literature exist on the level of awareness of typical parents and community professionals on the signs and symptoms of difficulties in sensory processing, and where to go to seek help.

A child’s unique sensory processing needs can impact their participation and independence in the daily occupations of play, education or learning, activities of daily living, and social interaction. As noted by Miller (2006) children may be categorized as sensory-avoiding, sensory seeking, or having motor skill problems. Sensory avoiding children may avoid being touched, be sensitive to clothing and other textures they come in contact with, fear movement and heights, feel uncomfortable in
loud or busy settings such as a basketball game, be overly picky eaters, and be sensitive to smells. Sensory seeking children are under-responsive to sensation. They seek out sensation which may be observed as touching others too hard, too often, or too forcefully, seeking out movement, and taking unsafe risks such as climbing too high.

The final category of children have difficulty planning and carrying out new motor actions (Miller, 2006). Children with motor planning problems may have poor fine motor skills such as manipulative skills when playing with toys, self feeding skills, and handwriting skills, poor gross motor skills such as catching or throwing a ball, and difficulties with coordination, balance, and sequencing of movements. These children may tend to get frustrated easily, and avoid new activities.

Kranowitz and Szklut (2003) also note behavioral issues that may be observed with difficulties in sensory integration such as impulsivity and distractibility, withdrawing from touch, fearful reactions to normal movement activities, difficulty adjusting to new situations, and frustration or aggressiveness when encountering failure. Other sensory processing problems such as tactile defensiveness results in aversive reactions to touch. Children who are tactiley defensive can exhibit
difficulties with activities of daily living and social/emotional functioning (Sears, 1994). This might include avoidance or sensitivity to daily activities such as toothbrushing, eating, washing, basic grooming activities, and sensitivity to certain clothing textures.

Cohn (2001) explored parent’s expectations regarding their children’s participation in occupational therapy using a sensory integration approach. Parents reported three main child focused hopes including positive changes in abilities, participation in activities (organized activities such as sports lessons, play, and personal care), and self worth. As a result of therapy, parents hoped their children would develop the behavior and skills needed to “fit in”, and to be included in school, home, and community. Cohn uses the term social participation to identify the three child focused outcomes that were reported and valued by parents. Cohn (2001) also notes a change in parent perspective before and after occupational therapy intervention, moving from “searching for a cure for their children’s condition... to envisioning a future with their children that included ongoing acceptance, accommodation, and advocacy.”

When considering OT intervention with children, the trend is provision of family centered care. This is supported by legislation such

According to Edwards et al. (2003), one of the goals of Part C is to improve the ability of families to meet the special needs of infants and toddlers with disabilities. It identifies the family as a central focus during assessment, planning, and intervention process.

Given the importance of family involvement, it is important to identify which factors contribute to this end. Edwards, Millard, Praskac, and Wisniewski (2004) sought to identify factors that encourage or inhibit family-centered practice in the occupational therapy intervention process and found that time was a barrier identified by both therapists and families, while caregivers regarded the family-therapist relationship as a significant source of support. All therapists identified the importance of incorporating the intervention process into the routines of the child's family.

Information from Barnaby, Mayer, Ward, and White (2002) supports the role of parents as guides during the intervention process, and the therapist's role of working with the family versus "fixing" the child. Cronin (2004) studied family routines and occupations, and how these are affected by mothering a child with hidden impairments such as
ADHD and Cystic Fibrosis. In both groups the ability to organize and maintain routines was central to the mothers' sense of well being and ability to fulfill their roles as mothers.

Cronin (2004) also reported a strong link between the child's social participation in school, church, and sports and the mother's sense of personal competence. Nelson (2002) explored the maternal process of mothering other-than-normal children, and the resultant stressors on the mother or caregiver when learning how to do mothering "plus extras". Berghmans, Crowe, Mann, and VanLeit (1997) found that role demands were high for mothers of a child with a disability, with the caregiving role being energy intensive and time consuming. The intensive caregiving role demands lead to giving up other roles in their life in order to meet caregiving obligations, in comparison to parents of typically developing children. Larson (2000) explored how mothers of children with disabilities orchestrate their daily occupations and routines in order to meet the needs of the child, family, and household. These studies support the need to address the child's therapeutic needs within the larger family context and routines and to consider the unique needs of the family and child when designing an intervention program. It also
supports the need to find ways to support the mother in her role as caregiver.

Dunbar (1998) explores the relationship of sensory processing on a child’s occupational performance in their daily lives, and demonstrated the effectiveness of the parent-therapist partnership to meet the needs of the child when used in collaborative goal setting and home program development. She emphasizes that the child as a whole person related to family and context, would be central to this process versus being a separate entity with motor delays, or cognitive delays. Occupational therapists seek to incorporate intervention ideas into a child and family’s daily routines. Segal (2004) explores the importance of family daily routines and rituals for the family’s functioning, achievement of family goals, and sense of identity. Segal (2004) emphasizes the unique relationship between family routines and rituals, and the implication that what may seem like a simple adaptation to the family routine may require a great shift or change in the family dynamics. This study supports the use of a family centered approach in establishing open communication during the assessment and intervention process.
The Ecology of Human Performance model encourages the therapist to consider the effect of context on a client's performance, and also to consider the importance of context during assessment and intervention planning (Brown, Dunn, and McGuigan 1994). Application of this model to student functioning is based on the premise that the interaction between the child and environment will affect the child's behavior and performance. When reviewing a child's behavior, performance, and level of functioning, these factors must be considered within the context of the environment. This supports the trend toward family centered care, when considering the sensory processing needs of the child within the context of the daily environment and routines of the family.

Cermak and Cohn (1998) sought to include the family perspective when evaluating outcomes for sensory integration based intervention. This supports the shift from the measurement of skills or behaviors of the individual, to the measurement of performance in the context of a child's daily home and school routines. Methods to evaluate outcomes might include parent checklists to measure changes in their child's
attention and organization, or measures of family functioning such as the Parenting Stress Index. (Cohn, 1998.)

Cohn, Miller, and Tickle-Degnen (2000) explored parents outcome hopes for occupational therapy using a sensory integration treatment approach. Child focused outcomes included desired improvements in social participation, developing skills to self-regulate behavior, and perceived competence or self confidence. Parent focused outcomes included learning strategies to help support their children, and obtaining personal validation.

The goal of occupational therapy in the treatment of sensory processing disorders is to help children learn how to organize their behaviors in order to meet environmental demands. Children are part of the larger family environment, and we must consider the environment in which they live, work, and play when designing and evaluating the effectiveness of interventions.

This scholarly project seeks to develop a set of documents that are applicable for children with symptoms of sensory processing disorder. The booklets will target information for parents and community professionals such as nurses, social workers, early childhood family
education staff, Head Start, and daycare providers. The booklets will include information on sensory processing and children, referral information, and the role of occupational therapy with children with sensory processing needs and their families. It will also include a list of resources on the topic of sensory processing.

The targeted populations who will use this product include those people who have contact with children beginning in the early childhood years, and are seeking information on how to improve a child's participation in home, school, and community routines. This includes parents and family, as well as professionals involved in community based services such as occupational therapists, social workers, public health staff, early childhood education staff and daycare providers.

It is clear from reviewing the existing research information, books, and website information that the definition and application of sensory processing assessment and intervention is continually evolving. The sheer amount and diversity of information reviewed on sensory processing theory, identification, and intervention can be overwhelming for even an experienced occupational therapist. Parents and community professionals such as daycare providers, public health, and social workers
are the individuals who have the potential to directly impact a child's development and functioning in home, school, and community settings. It is important that a useable method exist to educate these individuals on the area of sensory processing, in order to identify and address a child's early learning needs. This need can be met through the scholarly project manual by presenting sensory processing information at a reading level that can be read by the average person, and providing a summary of additional resources available. The manual is intended to be used as a starting point for awareness and identification of children with sensory processing needs, and as a starting point for seeking out additional information from the occupational therapist.
CHAPTER III and IV

METHODOLOGY and PRODUCT

The purpose of the product is to serve as a set of resources for parents and community service providers, in order to assist in the referral and intervention process for children with suspected sensory processing needs.

The literature review supports the concept that sensory processing needs can affect a child's participation in daily life activities. (Dunn, 2001). Difficulties can be observed in a child's daily occupations of play, learning, activities of daily living, and social interaction. The effects of sensory processing needs can impact a child in home, school, and community settings. The literature suggests that there is a need for families/parents to have information on sensory processing needs of children. (Edwards et al., 2004; Barnaby et al., 2002). It also suggests that parents are primarily concerned with everyday habits and routines of the child, both at home and school (Cronin, 2004; Larson, 2000).
Therefore, a booklet was designed to provide information to parents about the sensory needs of their child in relation to occupational routines. The booklet also contains an explanation of occupational therapy services for the child with sensory processing needs, and suggestions for seeking additional information or an occupational therapy referral. See appendix A.

Ayres (1979) reported the prevalence rate of sensory processing disorders ranged from 5% to 10% based on clinical experience. Miller (2006) reports 1 in 20 children are affected by Sensory Processing Disorder. Legislation such as Part B and Part C of the Individuals with Disabilities Education Act supports the provision of occupational therapy services to assist the child's educational needs and development. Occupational therapists have access to a wealth of information on sensory processing through professional literature and workshops. Community professionals such as Early Child Family Education staff, nurses, social workers, and daycare providers have direct contact with children and families in the home, community and early education settings, but do not have easy access to the same information on sensory processing. The knowledge base of community professionals in the areas
of sensory processing and role of occupational therapy can be affected by changes such as staff turnover and entry level professionals. New community staff members may not have past experience or knowledge in the area of sensory processing, and the role of occupational therapy intervention.

Therefore, a written method is needed to share introductory sensory processing information with community professionals, to assist in the early identification and intervention of children with sensory processing needs. The booklet for community professionals is found in Appendix B. It contains a literature review that defines sensory processing needs in children, and describes the impact of sensory processing on the child's daily occupations. It also includes information on the signs of difficulty with sensory processing and the role of occupational therapy in the pre-referral, referral, and intervention process.

Appendix C contains a list of sensory processing resources that would be applicable to both parents and community professionals. The resource list includes an overview of the content of each book, article, or
website listed in order to help meet the informational needs of the reader.
CHAPTER V

SUMMARY

The product was created which consists of a series of three resource booklets on the topic of sensory processing and the child. Appendix A contains information pertinent to the parent population including the signs of difficulty with sensory processing, defining the role of occupational therapy with the child with suspected sensory processing needs, and guidelines for the referral process. Appendix B targets community service providers and includes a literature review on sensory processing and the child, the signs of difficulty with sensory processing, and information on the role and referral process for occupational therapy. The third booklet, Appendix C, provides information which will be useful for both groups.

The product utilizes the prevention intervention strategy of the Ecological of Human Performance model to provide educational information on sensory processing, in order to assist parents and community professionals in preventing performance or behavioral
problems (Brown et al., 1994). The concept of family centered care is incorporated into the process, through the collaboration with parents and community professionals in the early identification and early intervention process.

The product can be utilized by community and school based occupational therapists to disseminate information on sensory processing and the child to parents and community service providers such as nurses, social workers, Early Childhood Family Education staff, and daycare providers. Appendix A and B could be used by school based therapists in order to share information with parents and teachers on the sensory processing needs of children, and the role of occupational therapy. The literature review in Appendix B would be useful to share with administration in order to gain support for the role of occupational therapy in preventative services with infants and children.

The product has several strengths in the use or clinical application. The written information is presented in a format which can be easily understood by the parent population. The product provides signs of sensory processing difficulty that a parent may observe in the child's daily life, and also provides information on accessing occupational therapy.

28
information and services in the community. The presentation of two formats (Appendix A and B), allow the therapist to target the information to the audience served.

Possible roadblocks in implementation include administrative and staff support of the expanded role of the occupational therapist in sharing preventative or pre-referral information with parents and interagency staff such as public health, social services, and Head Start. The groundwork exists for the interagency collaboration, through the current use of the IIIP (Individualized Interagency Intervention Plan) in which interagency service providers work together on a family based intervention plan. Limited time or limited communication with other agencies are realities that might hinder the preventative effort.

Solutions might include completing a needs assessment with staff on the county IEIC (Interagency Education and Intervention Committee) to determine what type of sensory processing information would be useful to them, and how to most effectively disseminate the information. A similar needs assessment survey could also be completed with parents in the community. The survey could be completed through collaboration with the local Early Childhood Family Education staff, who typically meet
regularly with parents and children in family education classes. A second solution might include the use of a focus group consisting of parents and community service providers, in order to identify educational and service needs.

The product is ready to be used in daily practice but ongoing revision would be beneficial in order to assure the Appendix C resource information remains current. The product usefulness could be measured through a survey completed by members of three groups. This would include parents, community professionals, and the occupational therapists who are disseminating the information. The survey questions would target the effectiveness of the information in meeting the stated objectives, and also invite suggestions for change.

A second method of reviewing effectiveness might involve tracking information on the number of occupational therapy contacts initiated by parents or community professionals in the area of sensory processing. The information could be gathered at the beginning and end of the school year, and compared to baseline information across time.

The product could be further developed in the future through use at the Early Childhood Family Education parent/child educational
sessions. Information on sensory processing could be targeted to the specific age groups of parent/child classes such as “Wonderful Ones”, “Terrific Twos”, and so on. The information could explore the unique child/family needs at each stage of the child's development, and could incorporate simple ideas for independence and success in the child's daily occupational routines. It also could include sensory processing strategies for adapting or altering the environment in order to promote success.

The product contains several options for future research in the areas of sensory processing and community service provision. Data could be gathered from parents and community service providers on the level of awareness of Sensory Processing Disorders and the role of occupational therapy. Research data could also be gathered on the effect of education on sensory processing with a targeted group, and the effect on perceived parenting success. Additional research might consider the role of education on Sensory Processing Disorders and the number of initiated contacts or referrals to occupational therapy.

The value of this product is that it provides a useful way for parents and community service providers to increase awareness of the child with suspected sensory processing needs, and where to seek help if
it is needed. The product is grounded in research that supports the concept of family centered care, and the role of occupational therapy in facilitating independence and success in the child's daily occupational routines. The product can be utilized as a first step in the community education effort on sensory processing and the child, and provides a base for future collaborative efforts between occupational therapy, parents, and community service providers to meet the unique needs of children.
APPENDICES
Appendix A

Sensory Processing: A Guide for Parents
Sensory Processing: A Guide for Parents

The purpose of the guide is to:

1. Help parents become aware of potential sensory processing needs in their children, and the impact on their daily life
2. Access community services such as Occupational Therapy
3. Access additional reading materials on the topic of sensory processing

This booklet can be reproduced for the occupational therapist to share with parents and community professionals as part of inservice training, or as part of the referral and intervention process.
WHAT IS SENSORY PROCESSING?
It is a process.

1. Children take in information through the senses
   (touch, taste, see, hear, smell, and movement)
2. They make sense of that information
3. They respond to it

When the senses are working well together, our children are often successful with their daily life activities. (Play, learning, and home routines.)

They can handle everyday touch and movement.
They are not bothered or distracted by what they see, hear, or smell.
They have a good awareness of their body, and how it moves.
They have appropriate behavior with others, and are able to handle changes or new activities.

An important idea to remember is that each of us is unique in what sensations we like or tolerate, and how we respond to them.

One child may love to move, run, jump, and play. Another child may prefer to sit quietly and draw or read books.
One child may love hugs, and be quick to touch people and toys.
Another child may be hesitant to touch people or explore toys.

In both examples each child handles sensations differently, and that is okay.

Sensory processing becomes a concern if the child’s ability to handle or respond to everyday sensations interferes with what they need to do in their daily life.
This might include difficulties with:
* behavior or interaction with others
* play skills
* self help skills such as eating and dressing
* learning
Remember:
--We all handle sensations in our own unique way.
--Sensory processing is a concern only when it interferes with what the child needs to do in their everyday life.

WHAT ARE THE SIGNS THAT MY CHILD MIGHT BE HAVING DIFFICULTY WITH SENSORY PROCESSING?

The purpose of the list is to help you become familiar with the signs of difficulty with sensory processing.

If you have concerns with your child in these areas, it is best to seek out the help of your local occupational therapist (O.T.). The O.T. can help you determine if what you notice is typical for your child’s development, or if further consultation is needed. The O.T. may also suggest that you talk to your pediatrician in order to rule out any medical concerns.

**Sensory Avoiding Children**
These children are overly sensitive to sensation. They may feel sensation too strongly or too easily.

Examples:
* avoids touch from others
* reacts negatively when touched; difficulty sitting close to others
* seems upset during diaper changing, face or hair washing
* sensitive to certain clothing types, or the tags/seams in clothing
* fears heights or movement
* seems very cautious; fearful of trying new things or taking risks
* is uncomfortable in loud or busy places such as a basketball game or large store
* sensitive to light or certain sounds
* is a picky eater, or is overly sensitive to food smells/sensations.
**Sensory Seeking Children**
These children are under-responsive to sensation. They often seek out stronger sensations, in order to get what they need.

Examples:
* seems overactive or often “on the go”
* seems to crave movement
* take risks such as climbing too high or jumping down
* likes to fall down in play
* often reach out to touch people, toys, or nearby objects
* touches others too often or too hard; often break toys.
* can be unaware of touch or pain
* may enjoy sounds that are intense such as a loud television; may hum or enjoy making noises.
* seems to wander around from toy to toy, without purposeful play

**Motor Skill Problems**
These children may have difficulty planning and carrying out motor movements.

Examples:
* child seems clumsy or accident prone
* difficulty learning new skills such as exploring small toys; feeding and dressing self
* problems learning developmental skills such as walking, kicking, catching and throwing a ball
* difficulty with balance, coordination, and sequencing movements
Sometimes these children prefer quiet or familiar activities such as watching t.v. or looking at books, versus group or movement activities.

**Other Notable Red Flags**
* difficulty adjusting to changes in daily routines
* often irritable and fussy, and has difficulty calming themselves
* sleep problems (such as needing a lot of help to fall asleep at night, or wake up in the morning)
* prefers to play more with toys or objects, rather than people
* has problems attending for expected periods of time during play or learning activities
Here are two examples of children who might be having difficulties in the area of sensory processing.

Example 1: Sam is a 3 year old boy. Sam likes to give hugs to his Mom and Dad, but seems uncomfortable when others touch him unexpectedly. He is a picky eater, and had a hard time trying new tastes and textures. Sam has learned to like his baths, but often cries when his face or hair is washed. He sometimes gags when brushing his teeth. Sam is a happy child, but seems to fall apart at large family gatherings. At his preschool class, he tends to choose the same toys to play with such as the blocks or cars. Sam seems very bright, and is learning his colors and counting. He really doesn’t explore in the sensory table, or play in a large group with the other kids. He has a hard time standing in line, and sometimes gets in trouble for hitting. Sam likes the routine of his day, but his parents wish that he could adjust to changes better. They also would like him to play with the other kids at preschool, and to be less sensitive when bathing and getting dressed in the morning.

Example 2: Beth is a 6 year old girl. Beth is always “on the go”, and her teacher describes her as a bright child. She loves hugs, and likes to touch others. Her friends sometimes get upset with her for being so close to them, or touching them. Beth likes to fidget with pencils and often puts things in her mouth. She sometimes finds it hard to sit at her desk and listen, and sometimes gets in trouble for moving or making noises during class. In P.E. class she gets frustrated when learning new coordination tasks such as jumping rope. At home and school, Beth struggles with learning how to play with others, staying seated at the table, and keeping her hands to herself.

Both of these examples show children with different styles of sensory processing, and different needs.

**WHEN DO I SEEK HELP?**

It is recommended that you seek help if several of these issues seem to be interfering with the child’s success or participation in daily life routines.
This may include difficulties in self help skills (eating, drinking, dressing), play skills, learning, behavior, and interaction with others.

<table>
<thead>
<tr>
<th>Remember:</th>
</tr>
</thead>
<tbody>
<tr>
<td>--If you have possible concerns about your child's sensory processing, it is a good idea to contact your local occupational therapist (O.T.)</td>
</tr>
<tr>
<td>--The O.T. can help you decide if further consultation is needed. The O.T. may also suggest that you talk to your pediatrician, in order to rule out any medical concerns.</td>
</tr>
</tbody>
</table>

**WHAT IS OCCUPATIONAL THERAPY?**

Occupational therapists help a child participate in daily activities that are meaningful to them. This includes activities of daily living such as eating, drinking, dressing, and hygiene. It also includes play skills, learning, leisure skills, and social interaction with others.

For the child with sensory processing difficulties, O.T. intervention might include:

* developing play skills and interaction with others
* activities that promote attention, listening, and direction following skills
* helping develop the motor skills needed to explore their home, and to play with toys
* helping develop skills for eating and drinking on their own
* providing ideas on adapting toys or the environment, so the child can be successful in their daily life routines

The O.T. can work with you and your child to help develop ideas that can be practiced as part of your daily routines. By working together as partners with the therapist, you can help your child be successful and independent in their daily life.
WHO DO I CONTACT IF I HAVE CONCERNS?

Concerns can be addressed through the occupational therapist in the medical or educational system. Medically based occupational therapy evaluation is available in your area. It is a good idea to talk to your child's pediatrician about any sensory processing concerns to determine if a medical based O.T. referral is needed.

In the school system, occupational therapy is considered a "related" service. O.T. services are accessed when the service is needed to meet the educational needs that are written on the child's educational plan (IEP or IIIP). It is a good idea to talk about any sensory processing concerns with your child's teacher or case manager. The educational team can determine if an educationally based O.T. referral is needed, in order for your child to be successful in school-related tasks.

If you have concerns with your child's sensory processing, the following contact person can also provide more information to you:

Julie Yutrzenka, OTR/L
Occupational Therapist
Area Special Education Cooperative
Office: 218-437-6616

The contact person will be happy to answer questions you may have, and help to guide you in the right direction.

For additional informational information, please see:
Appendix C: List of Resources on Sensory Processing
Appendix B

Booklet for Community Professionals
Sensory Processing: Booklet for Community Professionals

The purpose of this guide is to serve as a resource for community professionals such as nurse, social worker, Early Childhood Family Education staff, and daycare providers on the topic of sensory processing.

The guide will assist you to:

1. Define sensory processing, and understand how it can impact a child's participation and success in daily life.
2. Define the role of Occupational Therapy with the child with suspected sensory processing needs.
3. Identify when to refer children with suspected sensory processing concerns.
4. Assist parents in accessing community services such as Occupational Therapy.
Literature Review:

Professional literature supports the concept that sensory processing needs can affect a child’s participation in daily life activities. (Dunn, 2001). Sensory processing can impact a child’s behavior, play skills, interaction with others, learning, and self help skills. It is reported that 1 in 20 children are affecting by Sensory Processing Disorders (Miller, 2006).

Dunn (2001) hypothesizes in her Model of Sensory Processing that people demonstrate four sensory processing patterns: sensory seeking, sensory avoiding, sensory sensitivity, and low registration. Dunn also suggests that a person’s sensory processing preferences reflect their own nervous system needs.

Miller (2006) has found that children may be categorized as sensory-avoiding, sensory seeking, or having motor skill problems. Sensory avoiding children may avoid being touched, be sensitive to clothing and other textures they come in contact with, fear movement and heights, feel uncomfortable in loud or busy settings such as a basketball game, be overly picky eaters, and be sensitive to smells. Sensory seeking children are under-responsive to sensation. They seek out sensation which may be observed as touching others too hard, too often, or too forcefully, seeking out movement, and taking unsafe risks such as climbing too high.

The final category of children have difficulty planning and carrying out new motor actions (Miller, 2006). Children with motor planning problems may have poor fine motor skills such as manipulative skills when playing with toys, self feeding skills, and handwriting skills, poor gross motor skills such as catching or throwing a ball, and difficulties with coordination, balance, and sequencing of movements. These children may tend to get frustrated easily, and avoid new activities.

Kranowitz and Szklut (2003) also note behavioral issues that may be observed with difficulties in sensory integration such as impulsivity and distractibility, withdrawing from touch, fearful reactions to normal movement activities, difficulty adjusting to new situations, and frustration or aggressiveness when encountering failure.
Other research by Brown, Dunn, and McGuigan (1994) support the need to consider the effect of the context or environment, on a child's performance and behavior. Early identification of the child with sensory processing needs will help them be more successful in their daily home and school routines.

Occupational therapists help a child participate in daily activities or occupations that are meaningful to them. For children, daily occupations include play and leisure skills, learning, social interaction with others, and activities of daily living such as eating, drinking, dressing, and hygiene. Occupational therapists also address the habits, routines, and roles that children use to carry out their daily activities.

Cohn (2001) explored parent's expectations regarding their child's participation in occupational therapy using a sensory integration approach. Parents reported three main child focused hopes including positive changes in abilities, participation in activities (organized activities such as sports lessons, play, and personal care), and self worth. Cohn used the term social participation to identify the three child focused outcomes that were reported and valued by parents. A focus on family centered care helps to address the child's needs within the context of the home, school, and community settings. Occupational therapists consider the child's unique skills, the demands of the activity, and the context in which the activity is completed, in order to determine what is helping or hindering the child's occupational performance.
WHAT IS SENSORY PROCESSING?
It is a process.

1. Children take in information through the senses (touch, taste, smell, vision, hearing, movement, and awareness of body in space)
2. We make sense of that information
3. We respond to it

When the senses are working well together, our children are often successful with their daily life activities. (Play, learning, behavior, and daily home routines.)

They can handle everyday touch and movement. They are not bothered or distracted by what they see, hear, or smell. They have a good awareness of their body, and how it moves. They have appropriate behavior with others, and are able to handle changes or new activities.

Each of us is unique in what sensations we like or tolerate, and how we respond to them.

One child may love to move, run, jump, and play. Another child may prefer to sit quietly and draw or read books. One child may love hugs, and be quick to touch people and toys. Another child may be hesitant to touch people or explore toys.

In both examples each child handles sensations differently, and that is okay.

Sensory processing becomes a concern if the child’s ability to handle or respond to everyday sensations interferes with what they need to do in their daily life. This might include difficulties with their learning and interaction with others, play skills, and self help skills such as eating and dressing.
Remember:
--We all handle sensations in our own unique way.
--Sensory processing is a concern only when it interferes with what the child needs to do in their everyday life.

WHAT ARE THE SIGNS OF DIFFICULTY WITH SENSORY PROCESSING?

The purpose of the list is to familiarize you with signs of difficulty with sensory processing. If there are several concerns noted in these areas, it is best to seek out the consultation of your local occupational therapist (O.T.). The O.T. can help you determine if what you notice is typical for your child's development, or if further consultation is needed. The O.T. may also recommend the parent consult with their pediatrician, in order to rule out any medical concerns.

SENSORY AVOIDING CHILDREN

These children are overly sensitive to sensation. They may feel sensation too strongly or too easily. Parents or teachers may note that the child seems sensitive, appear moody or aggressive at times, or prefer few changes in their daily routines.

Examples:
* avoids touch from others
* reacts negatively when touched (hit, push, pull away)
* difficulty sitting close to others or standing in line
* seems upset during diaper changing, face or hair washing, when changing clothes
* sensitive to certain clothing types, or the tags/seams in clothing
* fears heights or movement
* seems very cautious; fearful of trying new things or taking risks
* is uncomfortable in loud or busy places such as a basketball game or large store
* sensitive to light or certain sounds
is a picky eater, or is overly sensitive to food smells/sensations. May gag during eating or during toothbrushing

SENSORY SEEKING CHILDREN
These children as under-responsive to sensation. They often seek out stronger sensations, in order to get what they need. Parents or teachers may note that the child likes to touch and move more than other children, or may seem rough in their play or interaction with others.

Examples:
* seems overactive or often “on the go”
* seems to crave movement
* take risks such as climbing too high or jumping down
* likes to fall down in play
* often reach out to touch people, toys, or nearby objects
* touches others too often or too hard; often break toys.
* puts toys or hands in mouth; sucks or chews on items
* may “rock” when sitting, or rock self to sleep
* can be unaware of touch or pain
* may enjoy sounds that are intense such as a loud television; may hum or enjoy making noises.
* seems to wander around from toy to toy, without purposeful play

MOTOR SKILL PROBLEMS
These children may have difficulty planning and carrying out motor movements.
Parents or teachers may note that the child has difficulty figuring out how to move his body, in order to do what he needs to do. The child may have problems learning how to ride a bike, hop on one foot, skipping, etc. During group motor activities, the child may watch others for clues on how to complete the task.

Examples:
* child seems clumsy or accident prone
* difficulty learning new skills such as exploring small toys; feeding and dressing self
*problems learning developmental skills such as walking, kicking, catching and throwing a ball.
*difficulty with balance, coordination, and sequencing movements
Sometimes these children prefer quiet or familiar activities such as watching t.v. or looking at books, versus group or movement activities. The quiet activities are more predictable, and require less motor planning of how to move their body.

OTHER NOTABLE RED FLAGS:
*difficulty adjusting to changes in daily routines
*difficulty adjusting to transitions from one activity to another, or moving from one place to another
*often irritable and fussy, and difficulty calming themselves
*sleep problems (such as needing a lot of help to fall asleep at night, or to wake up in the morning)
*prefers to play more with toys or objects, rather than people
*has problems attending for expected periods of time during play or learning activities

The child with suspected sensory processing needs may show signs of difficulties across several areas, or only mild needs in one area. The Occupational Therapist can help review these needs, to determine what type of intervention will help the child be more successful in their daily home and school routines.

Here are two examples of children who might be having difficulties in the area of sensory processing. The examples illustrate concerns that adults may notice at home or school.

Example 1: Sam is a 3 year old boy.
Sam likes to give hugs to his Mom and Dad, but seems uncomfortable when others touch him unexpectedly. He is a picky eater, and avoids trying new tastes and textures. Sam has learned to like his baths, but often cries when his face or hair is washed. He sometimes gags when brushing his teeth. Sam is a happy child, but seems to fall apart at large family gatherings in which there is a lot of noise and activity. At his preschool class, he tends to choose the same toys to play with such as the blocks or cars. Sam seems very bright, and is learning his colors and
counting. He really doesn't explore in the sensory table, or play in a large
group with the other kids. He has a hard time standing in line, and
sometimes gets in trouble for hitting. Sam likes the routine of his day,
but his parents wish that he could adjust to changes better. They also
would like him to play with the other kids at preschool, and to be less
sensitive when bathing and getting dressed in the morning.

Example 2: Beth is a 6 year old girl.
Beth is always "on the go", and her teacher describes her as a bright
child. She loves hugs, and likes to touch others. Her friends sometimes
get upset with her for being so close to them, or touching them. Beth
likes to fidget with pencils and often puts things in her mouth. She
sometimes finds it hard to sit at her desk and listen, and gets in trouble
for moving or making noises during class. In P.E. class she gets
frustrated when learning new tasks such as jumping rope; she has a hard
time motor planning how to move her body. At home and school, Beth
struggles with learning the social rules of how to play with others, staying
seated at the table, and keeping her hands to herself.

Both of these examples show children with different styles of sensory
processing, and different needs.

WHEN DO I SEEK HELP?

It is recommended that you seek help if several of these issues seem to
be interfering with the child's success or participation in daily life
routines.
This may include difficulties in self help skills (eating, drinking, dressing),
play, learning, behavior, or interaction with others.

Remember:
--If you have possible concerns about your child's sensory processing,
it is a good idea to contact your local occupational therapist (O.T.)
--The O.T. can help you decide if further consultation is needed.
The O.T. may also suggest that the parent consult with the
pediatrician, in order to rule out any medical needs.
WHAT IS THE ROLE OF OCCUPATIONAL THERAPY?

Occupational therapists help a child participate in daily activities that are meaningful to them such as activities of daily living, play and work skills, learning, leisure, and social interaction with others.

For the child with sensory processing difficulties, O.T. intervention might include:

*developing play skills and social interaction with others
*activities that promote attention, listening, and direction following skills
*helping develop the motor skills needed to explore their home and to play with toys
*helping develop skills for eating and drinking on their own
*providing ideas on adapting toys, learning materials, or the environment so the child can be successful in their daily home and school routines. An example is providing a visual schedule that the child can follow in order to complete the steps of getting dressed.

The O.T. can work with the child and the family/school staff to develop ideas that can be practiced as part of the child's daily routines. By working together as partners with the therapist, you can help the child be successful and independent in their daily life.

WHO DO I CONTACT IF I HAVE CONCERNS?

Concerns can be addressed through the occupational therapist in the medical and/or educational system. Examples of medical settings include a hospital, outpatient clinic, and private practice. In each of these settings, the role of O.T. intervention will be to improve the child's success and participation in daily life activities, but the type and focus of intervention will be different.

According to Miller (2006), there is a distinct difference in the focus of medically based and school based occupational therapy services.

Medically based occupational therapy services focus on improving the underlying neurological systems that affect a child's motor functioning
and behavior, as well as their success and participation in daily life activities.
Medically based O.T. services require a doctor’s referral and are accessed when individualized therapy is needed to meet the child’s sensory processing needs, or when the child’s sensory processing needs are not affecting school performance.

In the school system, occupational therapy is considered a “related” service as defined by Part B of the Individuals with Disabilities Education Act. O.T. services are accessed when the service is needed to meet the educational needs that are written on the child’s educational plan (IEP or IIIP). Part of the role of the O.T. in the school system is to determine the need for educationally relevant adaptations and accommodations that will improve the child’s school performance, as outlined in the IEP or IIIP. The school O.T. might consult on ways to modify the classroom or presentation of materials in order to improve success, suggest organizational strategies to implement when completing classroom work, assist in the development of activities of daily living (eating, dressing), and determine ways to develop the child’s social participation with others at school.
Referrals to the school O.T. begin with consultation with the building CST or Child Study Team, and often involve the teacher and case manager. If you have questions or concerns with a child’s sensory processing, the following contact person can provide more information to you:

______________________________

Julie Yutrzenka, OTR/L
Occupational Therapist
Area Special Education Cooperative
Office: 218-437-6616

The contact person will be happy to answer questions you may have, and help to guide you in the right direction. For additional information, please see:
Appendix C: List of Resources on Sensory Processing

52
References:


Appendix C

Sensory Processing Resources
Sensory Processing Resources


This book was written by one of the first experts in the field of sensory integration. It has been updated to be more accessible to families.

Topics include:
* defining sensory integration and how it develops
* specific chapters on vestibular (movement) difficulties, dyspraxia (difficulty learning new motor skills), touch sensitivity, visual perception and auditory language disorder.
* includes simple checklists to help identify needs in the above areas
* information specific to the child with autism
* explanation on the process of sensory integration therapy
* a section on frequently asked questions


This is a handbook of tools or activities that parents, therapists, and children can use to incorporate sensory integration ideas into the home. The activities or tools were designed to address challenging behaviors and develop attention and motor skills. The contents of this handbook were a direct result of a survey, in which parents identified need areas in their own lives.

Readers will appreciate the clear visuals and pictures used. The pictures help make the information interesting, and easy to read.

Topics include:
* Parent Sensory Tools survey
* Discovering your child’s sensory needs
* Getting ready: preparing the child for transitions, bedtimes, and more
* Homework: creating spaces for learning
* Can’t sit still: tips for sitting

55
*Scissor, pencil, and computer: prevention, development, and safety
*Seeing: preparing the eyes, body, and environment
*Playground and Parks: tips for promoting safety during KID POWER time
*Holiday Helpers: tips for surviving and enjoying the holidays
*Heavy Jobs: indoor and outdoor muscle activities
*Making Friends
*Challenging behaviors and introduction to Social Stories

Also includes a fill in the blank page that parents (or parent and child) can use to write down the sensory tools that work for the child in their daily life. Example: This is what I use when getting ready to: wake up, when going to bed, when setting up my homework space, when getting ready to play with a friend, etc.

Parents are encouraged to become “detectives” to discover what sensory tools work for their child.

Diana Henry also has other resources available such as a Tool Chest for teacher, parents, and students, videos, and Tools for Teens.

Her website is www.ateachabout.com


Includes many useful forms and guides for parents, teachers, and therapists.

Topics include:
*defining sensory processing and occupational therapy
*Ideas for organizing sensory input and ideas for the classroom
*Forms such as a classroom accommodations checklist
*Sensory processing checklists for different age ranges such as infants/toddlers (birth to age 2), preschool (age 3 to age 4), school age checklist (age 5 to age 12), and adult/adolescent checklist (age 12 and up).
*Includes detailed lists of characteristics of difficulties in the areas of tactile (touch), vestibular (movement), proprioception (sense of position), and visual/auditory processing.
*Also includes a glossary of common terms and list of resources on sensory processing


An excellent resource for parents, teachers, doctors, therapists and others who want to learn more about sensory processing disorder. Written by an early childhood educator, based on her own experiences with children. It is widely read, and may be available through your local library.

Topics include:
* Recognizing Sensory Processing Disorder including common symptoms, causes, and a sample Sensory-Motor Questionnaire
* Comparison of typical development of infants/children with a child with sensory processing concerns
* Individual sections that describe, "How to tell if your child has a problem with" the tactile sense, vestibular sense, the proprioceptive sense, the visual sense, or the auditory sense.
* Coping with Sensory Processing Disorder including a parent's search for answers, seeking professional help, and diagnosing the problem
* Sections on ideas for promoting success at home and school
* A unique section on coping with your child's emotions: valuable do/don'ts for parents and others involved in the child's life
* Also includes a glossary of common terms related to sensory processing, and resources such as equipment catalogs, organizations, and internet resources.


A second book by Carol Kranowitz that focuses on SAFE (Sensory-motor, Appropriate, Fun, and Easy) activities for kids. Parents, teachers, and therapists will appreciate the messages placed throughout the book that were contributed by parents and O.T.s. The short notes provide
additional ideas and feedback on the individual activity or game presented.

Topics include:
* A good portion of the book is devoted to the SAFE activities.
* SAFE activities are divided into chapters based on the sensory system they focus on: the Touch system, Balance and Movement (the vestibular sense), Body Position (the proprioceptive sense), Seeing, Hearing, Smelling/Tasting.
* Additional SAFE activities focus on related sensory skills such as oral motor skills, motor planning, fine motor skills, and bilateral coordination/crossing the midline.
* Each SAFE activity in the book contains the following information: the recommended age range, what you will need, preparation, what you can do, what your child can do, variations, benefits of the activity, and coping tips.

A must-read book for parents and community professionals. Written by a leading researcher in the field of Sensory Processing Disorders. Readers will appreciate the parent narratives describing what they see in their own Sensational Kids, and some of the stumbling blocks they have dealt with in the process.

Topics include:
* The Basics (what is sensory processing disorder, explanation of the types, common symptoms, assessment/diagnosis/treatment considerations).
* Beyond the Basics (explaining what is going on in the brain of the child with Sensory Processing Disorders (SPD), causes, and SPD with other diagnoses such as ADHD).
* "Red Flags" that may signal a variety of sensory processing difficulties
* Research information supporting Sensory Processing Disorders
* Especially for parents:
* explanation of school vs. medical based Occupational Therapy
* how to locate a trained occupational therapist
*a complete section on living with Sensational Kids
*Appendix A includes a list of resources for parents, teachers, and therapists including websites, books, organizations, and equipment resources.

Websites:


**The Sensory Processing Disorder Network.** Provides information and resources on Sensory Processing Disorder including all about SPD, frequently asked questions, the SPD resource directory, conferences, research, and SPD parent connections. [http://www spdnetwork.org](http://www spdnetwork.org)
REFERENCES


Los Angeles: Western Psychological Services.


Occupational Therapy, 53, 231-235.


The Sensory Processing Disorders Network. *What is sensory processing disorder?* Retrieved May 15, 2006 from

www.spdnetwork.org/aboutspd.whatisspd.html