

FOR MORE INFORMATION

Sensory Processing Measure includes:

- *SPM Manual* by L. D. Parham, C. Ecker, H. Miller Kuhaneck, O. A. Henry, & T. J. Glennon. (2007). Los Angeles: Western Psychological Services.
- *SPM Home Form* by L. Diane Parham & C. Ecker, 2007. Los Angeles: Western Psychological Services.
- *SPM School Form* by H. M. Kuhaneck, D. A. Henry, & T. J. Glennon, 2007. Los Angeles: Western Psychological Services.
- *SPM School Environments Forms* by H. M. Kuhaneck, D. A. Henry, & T. J. Glennon, 2007. Los Angeles: Western Psychological Services.

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Acknowledgments

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DeLana Honaker, PhD, OTR/L, BCP: “I was in the SPM focus groups and then did the first two rounds of data collection when the SPM was known as the SASI. I had absolutely *no* difficulties in my former school district collecting data. As the lead therapist, I had done research and data collection for several years. I had established strong relationships with teachers, parents, principals, the special ed director, and assistant superintendents. This was a place where we OTs had defined our roles rather than allowed others (i.e., administrators or parents) to define them for us.”

THINKING OUTSIDE OF THE BOX

When the Education for All Handicapped Children Act of 1975 ¹⁰ (the precursor to IDEA) was passed, only special education staff and parents attended individualized education program (IEP) meetings. So in the early 1990s, when asked to participate in IEP meetings, most general education teachers were uncomfortable with this new responsibility, believing that they were not educated to know how to address special education needs. Through participation, general education teachers have learned that they have much to contribute. By being on the SPM team, recess assistants, cafeteria workers, and bus drivers will also become more comfortable as they are engaged in contributing important information to a student’s program. Those I have worked with and who have become familiar with the SPM are excited to learn more about occupational therapy and to work together to develop strategies to embed into their individual environments, including the playground, cafeteria, and school bus.

Lori Buckley, MS, OTR/L: “I only had difficulty getting all the different people to fill out and turn in their questionnaires—especially the lunch aides and recess aides. They were not used to filling out questionnaires, since they were not ‘professional staff.’ I did enjoy doing the data collection, though.”

SATISFACTION

AOTA President M. Carolyn Baum, PhD, OTRIL, FAOTA, stated in the inaugural “Science Connection” column in *OT Practice*, “All of us can contribute knowledge, but it’s a matter of producing the knowledge in a way that has validity so that people can use the information and duplicate the information that we generated” (p. 10).¹¹

Deanna Sava, MS, OTR/L: “I was involved in content analyses, pilot studies, and standardization (normative and clinical) studies for the SPM. The SPM will be completed by people who interact with students in their natural environments (parents, teachers, staff). I had great support from the administrators and teachers, who commented that the SPM could help other students who were not part of the pilot and standardization studies. Although I might have acquired a few gray hairs along the way, I learned a lot in the process about how to approach parents and staff when conducting studies. I have a newfound admiration and respect for occupational therapists who are trying to develop an assessment. Although there were challenges and surprises along the way, I wouldn’t take back a minute of my participation in the SPM studies.”

LOOKING INTO THE FUTURE

The pilot studies, focus groups, data collection, and statistical analyses created what is now a user-friendly statistically sound assessment tool. You now also have the opportunity to use the SPM for further research endeavors. Because of the care taken by the authors of the SPM, as well as the data collectors, this tool will also contribute to the further development of evidence. In speaking about knowledge translation, *American Journal of Occupational Therapy* Editor Mary Corcoran cited the National Center for the Dissemination of Disability Research as describing the conceptualization of knowledge as “definable, useable units that can be arrayed in front of practitioners who will then find among them something to solve their problems” (p. 487)¹² Rejoice. If you have not yet been a data collector, your time has come! •

COLLABORATION

Because collaboration is critical in the schools, the SPM was designed to promote interaction among (and between) school staff, parents, and clinic-based therapists. Collaboration requires understanding, sharing, and giving, which often results in everyone benefiting as all work together toward common goals.

Ann-Christin Hyatt, MS, OTR/L:

“Initially, we were of the impression after talking to our special education director that all would be fine, but I was wrong! Our assistant superintendent informed me that we could not do anything with this study until it was approved by the board. Despite this step back, the special education director, who has been very supportive of the work we do, wrote something for the board and all was fine!”

ROADBLOCKS

There are times when one does hit a “brick wall.” Sometimes we have to take a totally different road.

Jackie King, OTR: “My colleague and I tried to be involved in the research through data collection. I asked my supervisor about being involved in this project and was informed that it was unlikely to happen. The director of our facility said confidentiality and informed consent were the main problems. I assured him that no one would have access to the children’s identities and no identifying information would be available to anyone outside the facility. I explained the purpose of the data collection and the benefits it would have. I also said it would benefit our facility by letting others know we were involved in research of this quality.

“I was told that it would be easier if we did not become involved in this so that no one could complain that we did anything wrong. I found the experience to be very frustrating since know the importance of research, but I don’t necessarily feel I know how to do it. I now work for an agency that I believe would jump at the chance to be involved in something like this.”

EXPANDING ONE’S ROLE

Our roles as occupational therapy practitioners vary and we must be open to possibilities. One of the greatest challenges our data collectors experienced was that of role release. The SPM raters are not the practitioners. The raters are the parents and school staff who complete questionnaires specific to their individual environments. When the practitioners let go of control, their great “ah-ha” was that in exchange, the SPM empowered all on the team to “own” the assessment by providing observations from within their individual environments, ecocultural niches, and curriculums, resulting in even greater teamwork and exchange of ideas.

Diane Desilets, OTR/L: “During my experience as a COTA working towards transitioning to becoming an occupational therapist, one of the requirements of my academic program was to present on a topic of choice that incorporated my interests, professional development, and research. I was immediately interested in the SPM because as practitioners in school systems we are being asked to use EBP by educators, parents, and administrators in the delivery of occupational therapy services. I had the opportunity to collaborate in collecting data on the SPM. Under the supervision of my professor and the guidance of Diana Henry, I presented to fellow students and occupational therapists a sneak preview of the SPM at the at the World Wide Wellness/ Trends in OT Conference at Salem State College in Massachusetts in December 2005.”

BUILDING ON SUCCESS

Each year since data collection began in 2002, additional exciting possibilities occurred. After using the SPM (in development) with typical students, the principal from that school invited me to return and use it again the following year with a case study, referred by the school Student Study Team, as a prereferral, early identification, and prevention measure. She said her staff had liked using the SPM so much during the data collection process that they were wondering if it could be a good tool to use as an early identification measure to help staff develop strategies before a child was referred for further testing.

Maria Scalia, OTR/L: “I began the collection process in April, and between the Good Friday holiday and the weeklong spring break in late April, it is a very short month. April and May are tough months in the school system anyway due to state testing and the approach of the end of the year. Getting extra paperwork from teachers toward the end of the fourth quarter is challenging— they are pretty overloaded— as am I with all of the end-of- year annual reviews for classified students. Since I am the lone CT in the district, the collection fell completely to me. I wound up doing the paperwork before school (coming in 30 minutes early) and/or during my lunch period.”

IN-SERVICES

Historically, research has not been part of the school-based practitioner’s workload; therefore this activity is not well understood by educators and parents. Helping them understand the importance of EBP is a crucial step in obtaining their “buy in.” Providing in-services is a good way to share with parents and staff how research contributes to better service delivery for all. Including food and linger fidgets during the presentation are good ways to hold their attention.

Shanti Malladi, MS, OTR/L: “I had a difficult time with the parents cooperating to give permission for their child to be part of the data collection; completing questionnaires; and giving permission to those working in the main classroom, art, music, PE, recess, cafeteria, and school bus environments to also complete questionnaires on that child. I also faced difficulties with the teachers, who almost convinced me that the data collection process was too boring and long. I finally gave an in-service at the district office and explained why it was very important to get all the data necessary to help each child. I explained all the occupational therapy terms used in the forms, why we use them, and so forth. This helped me, and then it was very easy.”

EDUCATION

Before I began the data collection process, the first person I would meet with was the administrator (school principal). I always asked the administrative assistant to schedule me for at least half an hour with the administrator, so I could provide background related to supporting evidence-based education through participation in research. I also wanted to share a bit more about occupational therapy, sensory integration, and sensory processing and their impact on learning, behavior, and prevention. I found that a little education went a long way.

Janet Correia, OTR/L: “I received some feedback from the principal that referred to the research project as ‘that marketing thing.’ I had a gentle conversation informing her that it was not marketing and suggested that I do several in-services to educate the staff. This project has inspired me as an OT to do more using a sensory-based approach. I’m seeing more and more typical’ kids with sensory concerns who motivate me to do more research with our physical therapist.”

PERSEVERANCE

Scheduling to meet with all those involved in the data collection process was often challenging. People forgot about meetings I had scheduled, and emergencies came up. For example, a teacher suggested we meet in her classroom during her lunch period. Just as we were beginning, a student was sent to her classroom to eat lunch because he had had problems in the cafeteria... and then the phone rang with an angry parent at the other end. “Oh, well,” I smiled, and we rescheduled.

Sandee Chalik, MS, OTR/L:

“The biggest problem I had was getting parents to return the forms to me within the time frame, and balancing the project with my own schedule.

We all know what that is like. But it was worth it! Participating in research is something we all need to do to advance our profession. I can hardly wait until the SPM comes out!”

environment for at least 1 month could be a rater. It is difficult to tell how many raters actually completed the forms because some students had the same raters (e.g., the music teacher completed all the music forms for students in that school). As a result of the pilot studies, focus groups, and statistical analyses, the SPM forms evolved from containing more than 200 items in pilot studies to some having as few as 15 items (e.g., the Cafeteria School Environment Form, to be completed by the cafeteria worker or assistant).

This article highlights some of the challenges and successes I faced, with additional comments from other data collectors. You will discover (as we did) that participating in data collection requires creativity. As stated in the book *Out of Our Minds. Learning to be Creative*, “In any creative process, there are likely to be dead ends; ideas and designs that do not work. There may be failures and changes before the best outcome is produced. Evaluating which ideas do work and which don’t involves judgment and critical think big. Understanding this is an important foundation for creative development” (p. 133).⁹ My hope is that the following will inspire and prepare you to participate in creative and rigorous research.

POLICIES AND PROCEDURES

Check all the policies and procedures of your facility before you start. I learned one of my first lessons in this area when I was collecting data in Arizona schools, and I was told I could not interview the bus driver. Although the school principal had signed a form giving me permission to interview her school staff, there were different policies for bus drivers because they worked under a different administrator. After I understood the policies, we developed special permission forms for bus administrators.

Norma Eagles, MS, OT/L:

Our county has a 7-page policy statement entitled *Research Projects Involving Employees and Students*. Although I understand the need for ethics and responsibility, and the need to protect the privacy of our students while carrying out research, this type of application can be daunting for all but university- or corporation-funded projects. I was able to collect data on typical children, which required only the approval of the school principal’

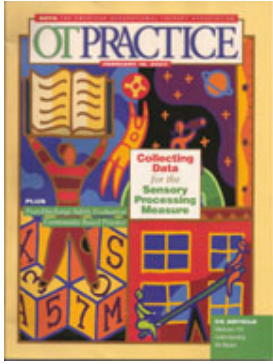
TIME COMMITMENT

Schedule more time than you think the data collection will take. One of the studies I conducted required meeting with 10 different individuals, including the classroom teacher, resource specialist music teacher, art teacher, PE teacher, recess assistant, cafeteria worker, counselor, parent, and occupational therapist for that school. In addition to the time spent on interviews, it took additional time that I had not anticipated to make the initial contacts, follow up with reminders, and reschedule canceled meetings.

Kim Sicheneder, MS, OTR/L: It was a very challenging task. I had to go to the principal and ask her permission. She sent me to the unified office. I had to pick up paperwork there, have the principal sign it, and then return that to the district office. I then had to schedule an appointment with the superintendent. I had to meet with him, explain the study, and leave him with copies of everything. He was most interested in how much time this would take for the teachers to complete and how the information would be helpful to the students.”

TIMING

Know the schedules of those you want to study, and be sure to pick times that work best for them. The following scheduling challenges resulted from the SPM author’s need to rewrite items for that data collection phase, delaying when the data collectors could begin. By the time they received the forms, it was the last quarter of the school year, a busy time for all in the schools. I encourage practitioners to expand their job descriptions to include time for participating in research (i.e., collecting data) to support EBP, allowing for flexibility in their schedules.



Collecting Data *for the* *Sensory Processing Measure (SPM)*



DIANA A. HENRY

Lessons Learned

Administrators in U.S. public school systems are increasingly requiring evidence-based interventions, based on the No Child Left Behind Act of 2001,² as well as the 2004 re-authorization of the Individuals with Disabilities Education Act (IDEA).³ Generating and using evidence is also an essential component of the American Occupational Therapy Association's (AOTA's) Centennial Vision.⁴

“Do not waste time blaming the ‘system.’ Instead be a change agent: a vital and rewarding role in our profession” (p. 26).¹

As a pediatric occupational therapy practitioner “in the trenches” in a school or a clinic, you are probably excited about contributing to and participating in research through active data collection. Although data collection is extremely rewarding, it does have some challenges. In this article I present issues to ponder so you can be successful, and contribute to evidence-based practice (EBP).

My colleagues and I sought data collectors from 2002 through the spring of 2006, when we were developing the School Assessment of Sensory Integration (SASI),⁵⁻⁷ now the Sensory Processing Measure (SPM). The name was changed in 2005 (before being published by Western Psychological Services) to the SPM because the SASI acronym was already being used by another organization. The authors of the Evaluation of Sensory Processing (ESP)⁸ joined with the SASI authors to form a new SPM team and added items to their original ESP so that their SPM Home instrument would be comparable with the SPM School instruments. The SPM now comprises the SPM Home Form, the SPM Main Classroom Form, and the SPM School Environments Form.

The final data collection, in 2006, was conducted on 1,051 children who were typically developing and 345 children receiving clinical services across the United States. The SPM is an assessment tool to help school- and clinic-based therapists collaborate with parents and school personnel in identifying sensory and environmental issues that may be affecting a child's performance across seven school environments (main classroom, physical education [PE], art, music, recess/playground, cafeteria, and bus) and at home. It can be used as a “top down,” “bottom up,” or “global” assessment tool. It provides the opportunity to examine social participation, the behaviors indicative of sensory processing disorder, the sensory systems that may be contributing to modulation dysfunction, and the components of ideation and motor planning that may be contributing to dyspraxia. It is used with students from kindergarten through sixth grade.

Despite the enthusiasm expressed by the majority of therapists we contacted at the American Occupational Therapy Association Annual Conferences, as well as those I met on the road during my “Ateachabout” workshops, many encountered challenges as they began collecting data. More than 1,000 occupational therapists and occupational therapy assistants have participated as coordinators since data collection began in 2002. Their job was to obtain permission from the school administrators and the parents of the children in the studies. Each coordinator then gave rating forms unique to the seven school environments and the home to the raters, which could add up to eight different individuals for each child. Anyone who knew the student in that