

The Relationship between Behaviors Associated with Sensory Processing and Parents' Sense of Competence

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Hypotheses and Prediction

- There will be a significant relationship between:
 - a) overall parent sense of competence, b) parental satisfaction, and c), parental self-efficacy and their children's behaviors thought to reflect sensory processing problems.
 - a) overall parent sense of competence, b) parental satisfaction, and c) parental self-efficacy, and their children's behavioral responses.
 - children's behaviors thought to reflect sensory processing problems and maladaptive behavioral responses.
- Which child behaviors best predict a) overall parent sense of competence, b) parental satisfaction, and c) parental self-efficacy?

Participants (N = 248, range = 4-12 years, gender = 181 males and 67 females)

- Excluded: Children with Autism, Pervasive Developmental Disorder, Emotional diagnoses; except anxiety.
- All children were identified as having a SPD based on the SIPT.
- Diagnoses: 208 SPD only, 40 SPD and other diagnosis (per parent report) (e.g. attention deficit disorder, anxiety or mood disorder, learning disability, and non-verbal learning disability).
- Demographic: Largely white, upper-middle to upper socio-economic status.

Parent Characteristics

- 71% Mothers, 12% Fathers, 17% not reported, 93% Married, 89% held at least bachelors degree

Measures

- Sensory Profile (Dunn, 1999)
- Parenting Sense of Competence Scale (PSOC) (Gibaud-Wallston & Wandersman, 1978),
- Child Behavior Checklist (CBC-L) (Achenbach, 1991)
- Leiter-R Parent Rating Scale (Roid & Miller, 1997).

Child Characteristics

- On average the SPD group performed in the probable difference range on the Sensory Profile.
- 7 of 10 Leiter scores were within the dysfunctional range
- 8 of 12 CBC-L scores were within the clinical range

PSOC and Sensory Profile

- Total Score of the PSOC was significantly correlated with 13 of 14 sections. 10 at $p \leq .001$ and 2 at $p \leq .05$. $r = .060$ to $.337$.
- Satisfaction subscore of the PSOC scale was significantly related to 13 of 14 sections. 7 at $p \leq .001$. Correlations ranged from $r = .118$ to $.364$.
- Efficacy subscore of the PSOC scale had small significant correlations with 5 section scores. None of the correlations were greater than $.217$ and most were very small in the $.10$ range.

PSOC and Leiter

- PSOC correlated with all sections. $p \leq .001$. Correlations ranged from $r = .183$ to $.426$.
- Satisfaction Subscore of the PSOC correlated with all sections. 7 of 9 at $p \leq .001$, 2 at $p \leq .005$, and 1 at $p \leq .05$. Correlations ranged from $r = .168$ to $.387$.
- Efficacy Subscore of the PSOC correlated with all but one subscore, Moods and Confidence. 6 of 9 $p \leq .005$ and 3 at $p \leq .05$, correlations ranged from $r = .127$ to $.333$.

PSOC and CBC-L

- Total Score of the PSOC significantly correlated with the CBC-L. 6 of 9 subsections at $p \leq .001$ and 3 at $p \leq .05$. Correlations ranged from $r = -.143$ to $-.365$.

- Satisfaction section of the PSOC. 7 of 9 subsections at $p \leq .006$ and 2 at $p \leq .02$. Correlations ranged from $r = -.132$ to $-.385$.
- Efficacy section of the PSOC. 4 of 9 subsections at $p \leq .004$ and 2 at $.05$. Correlations ranged from $r = -.049$ to $.292$.
- CBC-L Internalizing, Externalizing and Total Score domains were most strongly related to parent Satisfaction. $p \leq .001$, $r = -.301$, $-.350$, and $-.385$ respectively.
- Parent Efficacy was not related to Internalizing behaviors but was moderately related to Externalizing behaviors and CBC-L Total Score at $p < .001$.
- Total Score of the PSOC was moderately related to the Internalizing, Externalizing and Total Scores of the CBC-L at $p \leq .001$ with $r = -.217$, $-.365$, and $-.356$ respectively.

Sensory Profile, Leiter-R, and CBC-L

- Almost all parts of the sensory profile correlated significantly with all parts of both the Leiter and CBC-L. Correlations ranged from $.019$ to $.781$.
- Emotional/Social responses is the subscale on the SP which most highly correlates with the Leiter-R and CBC-L

Prediction of PSOC Total Score

- Best predicted by 2 items: Leiter Social Abilities section and Sensory Profile Vestibular Processing section, Adjusted R-Square of $.212$

Prediction of PSOC Satisfaction

- Best predicted by 2 items: CBC-L Social subsection and Leiter Social Abilities, Adjusted R-Square of $.209$.

Prediction of Parenting Efficacy

- Best predicted by 6 items: Leiter- Social Abilities, Emotions/ Regulation, Moods/ Confidence; CBC-L Sex Problems; Sensory Profile Emotional/ Social Responses and Vestibular Processing. Adjusted R-square of $.228$.

Conclusions

- Social participation matters: social behaviors thought to be associated with sensory processing disorders relate to parents sense of satisfaction with their parenting
- Parental satisfaction (as measured by PSOC) correlated to behavior measured on SP more than efficacy
- Parents in sample slightly less satisfied than normative sample
- Behaviors thought to be associated with vestibular processing important predictor of PSOC
- Intervention focused on strategies to support social participation indicated

References

- Achenbach, T. M. (1991). Manual for the Child Behavior Checklist. Burlington, VT: University of Vermont, Department of Psychiatry.
- Cohn, E. S. (2001). Parent perspectives of occupational therapy using a sensory integration approach. *American Journal of Occupational Therapy*, *55*, 285-293.
- Cohn, E. S. & Cermak, S. (1998). Including the family perspective in sensory integration outcomes research. *American Journal of Occupational Therapy*, *52*, 540-546.
- Cohn, E. S., Miller, L. J. & Tickle-Degnen, L. (2000). Parental hopes for therapy outcomes: Children with sensory modulation disorders. *American Journal of Occupational Therapy*, *54*, 36-43.
- Dunn, W. (1999). *Sensory Profile user's manual*. United States: The Psychological Corporation.
- Johnston, C. & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*, *18*, 167-175.
- Lovejoy, M. C., Verda, M. R. & Hays, C. E. (1997). Convergent and discriminate validity of measures of parenting efficacy and control. *Journal of Clinical Child Psychiatry*, *26*, 399-376.
- Ohan, J. L., Leung, D. W. & Johnston, C. (2000). The Parenting Sense of Competence Scale: Evidence of a stable factor structure and validity. *Canadian Journal of Behavioral Science*, *34*, 251-261.
- Roid, G. H., & Miller, L. J. (1997). Leiter International Performance Scale-Revised. Wood Dale, IL: Stoelting Company.R