



American Association
on Intellectual and
Developmental Disabilities

September 6, 2013

The Honorable Senator Nancy Rodriguez
Disabilities Concerns Subcommittee
Legislative Health and Human Services Committee
Socorro, New Mexico

Re: Status and Funding of Supports Intensity Scale (SIS) Activities Agenda Item

Madam Chairwoman and Members of the Disabilities Concerns Subcommittee:

This document addresses the use of Supports Intensity Scale® (SIS®) with non-English speakers and speakers of English as a second language (ESL).

The American Association on Intellectual and Developmental Disabilities (AAIDD) is a nonprofit professional membership organization whose mission is to promote progressive policies, sound research, effective practices and universal human rights for people with intellectual and developmental disabilities.

In 2004, AAIDD first published the SIS, an evidence-based, standardized supports needs assessment tool that directly measures the pattern and intensity of extraordinary supports needed by individuals with intellectual and closely related developmental disabilities to live and participate in the community. The SIS is used to determine a person's support needs in various life activities relative to others with intellectual and developmental disabilities (Thompson, et al., 2004).

Since its launch, the SIS has been translated into 13 languages (Catalan, Czech, Complex Chinese, Croatian, Dutch, French, Hebrew, Icelandic, Italian, Japanese, Korean, Portuguese, and Spanish). Data that have been collected and published on translated versions of the SIS have consistently shown that the psychometric properties (e.g., reliability, validity) have been consistent with the original 2004 English version.

Numerous peer-reviewed research studies document the high reliability and validity of the SIS with non-English speakers, most recently studies by:

- Claes et al. (2009) which demonstrated high reliability and validity of the Dutch version of the SIS.

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- Lamoureux –Hébert and Morin (2009) on the translation and cultural adaption of the SIS and found that the French translation’s psychometric properties were strong and largely consistent with the English version.
- Ortiz, Rio, Rodriguez, and Robaina (2010) that evaluated the applicability of the SIS (Spanish version) for people with severe mental illness, and demonstrated support for the conceptual and empirical utility of the SIS to understand the needs and expectations of people with mental illness in Mexico.
- Verdugo et al. (2010) that demonstrated the reliability and validity of the Spanish version of SIS was to equal that of the English version.

Within the US, the vast majority of assessment tools in the field of intellectual and developmental disabilities are developed, standardized, and normed with a pool (or sample) predominantly consisting of native English speakers. For the standardization process of the SIS in the US, non-English speakers and ESL speakers were included in the norming sample. The breakdown of primary understood language and ethnicity of the norming sample were:

Ethnicity	Primary Language Understood
European 80%	English 97%
African American 14%	Spanish 1%
Hispanic 3%	Other 2%
Native American 1%	
Asian <1%	
Other 2%	

The SIS has proven to be a valid and reliable tool when translated to another languages. Like all standardized scales, whenever interpreters are used, questions may arise about the quality of the communication. Unlike other standardized measurement scales used in the field of intellectual and/or developmental disabilities, data have been collected and published that demonstrate that the validity of the SIS remains intact with competent interpreters. One can say with confidence, that the psychometric properties of the SIS are quite robust and the items on the scale show etic (universal) qualities.

At present, AAIDD makes a Spanish translation of the *SIS Trainers’ Guide to Scoring the SIS* (2011) available to customers upon request.

Attached is a brief bibliography of research studies on the SIS published between 2005 and 2012 in peer-reviewed academic journals, and includes the above-mentioned studies for non-English speakers.

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**Research Studies Reporting Data from the *Supports Intensity Scale*[®]
in Peer-Reviewed Academic Journals**

1. Bossaert, G., Kuppens, S., Buntinx, W., Molleman, C., Van den Abeele, A., & Maes, B. (2009). Usefulness of the Supports Intensity Scale (SIS) for persons with other than intellectual disabilities. *Research in Developmental Disabilities, 30*, 1306-1316.

Large scale study (n=1,303) investigating the psychometric properties of the SIS for populations other than ID (sample included people with primary diagnosis of physical disability, psychiatric disability, TBI, sensory disabilities, autism spectrum disorders, and other disabilities). The authors concluded that a shortened version of the SIS (22 items) provided a psychometrically sound measure of support needs for a diverse sample of people with disabilities.

2. Brown, H. K., Ouellette-Kuntz, H., Bielska, I., & Elliott, D. (2009). Choosing a measure of support need: Implications for research and policy. *Journal of Intellectual Disability Research, 53*, 949-954. doi:10.1111/j.1365-2788.2009.01216

40 staff or family members completed the SIS and the SIB-R (an adaptive behavior scale). Data from the two scales were highly correlated.

3. Buntinx, W., Van Unen, F., Speth, W., & Groot, W. (2006). The Supports Intensity Scale in the Netherlands: Psychometric properties and applications in practice. *Journal of Applied Research in Intellectual Disabilities, 19*, 245-246.

Data analysis of the SIS (Dutch Version) revealed strong psychometric properties across a variety of indicators of reliability and validity.

4. Claes, C. Van Hove, G., Vandeveld, S., van Loon, J., & Schalock, R. (2012). The influence of support strategies, environmental factors, and client characteristics on quality of life-related personal outcomes. *Research in Developmental Disabilities, 33*, 96-103.

SIS Data were collected on 186 individuals with ID, and the sample spanned the range of support needs (from less intense needs to more intense needs). Quality of Life outcomes were related to the availability and use of a variety of support strategies.

5. Claes, C. Van Hove, G., van Loon, J., Vandeveld, S., & Schalock, R. (2009). Evaluating the inter-respondent (consumer vs. staff) reliability and construct validity (SIS vs. Vineland) of the Supports Intensity Scale on a Dutch sample. *Journal of Intellectual Disability Research, 53*, 329-338.

The SIS was used to interview (a) 75 individuals with ID to obtain their ratings of their own support needs, and (b) interview a corresponding group of staff members to obtain staff ratings of each individual's support needs. SIS ratings were highly reliable between the two groups; individuals who rated themselves as having relative more intense or relatively less intense support needs compared to others in the sample were also rated by staff as having

relative more intense or relatively less intense support needs. However, although staff and individual ratings paralleled one another, people with ID rated themselves as having far less intense support need than did staff.

6. Ortiz, M. C., Rio, C. J., Rodriguez, M., & Robaina, N. F. (2010). Applicability of the Spanish version of the Supports Intensity Scale (SIS) in the Mexican population with severe mental illness. *Rev. Latino-Am. Enfermagem*, *18*, 975-982.

The SIS was administered to 96 people with a primary diagnosis of mental illness. Using expert judges as well as data from another assessment scale (i.e., the Global Functioning Assessment), the authors concluded that the SIS can be used to better understand the support needs of people with mental illness.

7. Guscia, R., Harries, J., Kirby, N., & Nettelbeck, T. (2006). Rater bias and the measurement of support needs. *Journal of Intellectual & Developmental Disability*, *31*, 156-160. doi: 10.1080/13668250600876459

SIS data (n=29) were used as one of the measures to investigate the extent of rater bias associated with using the Service Need Assessment Profile (SNAP). Authors concluded that SNAP raters overestimated support needs when they knew results were going to be used to determine funding levels, and suggest this may be a problem with other support needs assessment tools.

8. Guscia, R., Harries, J., Kirby, N., Nettelbeck, T., & Taplin, J. (2006). Construct and criterion validities of the Service Need Assessment Profile (SNAP): A measure of support for people with disabilities. *Journal of Intellectual & Developmental Disability*, *31*, 148-155. doi:10.1080/13668250600876459

SIS data (n=114) were used as a measure to investigate the construct and criterion validities of a new support needs assessment scale, the Service Need Assessment Profile (SNAP). SIS data confirmed the validity of the SNAP as a support needs measurement tool.

9. Harries, J., Guscia, R., Kirby, N., Nettelbeck, T., & Taplin, J. (2005). Support needs and adaptive behaviors. *American Journal on Mental Retardation*, *110*, 393-404.

SIS, ICAP, and ABS data were collected on 80 individuals. Correlations between the SIS (a support needs measure) and the two adaptive behavior scales were high. Factor analyses were completed using all three data sources, and the authors concluded that the three scales were measuring the same construct.

10. Jemaro, C., Cruz, M., del Carmen Perez, M., Flores, N. E., & Vega, V. (2011). *Archives of Psychiatric Nursing*, *25*(5), e9-e17.

182 participants were assessed using the SIS and the Global Assessment of Function. Based on a variety of data analyses including discriminant analysis, the authors concluded that

nursing professionals could use the SIS with confidence for purposes of planning supports with this population.

11. Kuppens, S., Bossaert, G., Buntinx, W., Molleman, C., Van den Abbeele, A., & Maes, B. (2010). Factorial validity of the Supports Intensity Scale (SIS). *American Journal on Intellectual and Developmental Disabilities, 115*, 327-339.

SIS data from a sample of 14,862 were analyzed using confirmatory factor analytic procedures. Fit statistics showed a strong fit with the SIS subscale structure (6-factor model).

12. Lamoureux-Hébert, M., & Morin, D. (2009). Translation and cultural adaptation of the Supports Intensity Scale in French. *American Journal on Intellectual and Developmental Disabilities, 114*, 61-66.

Psychometric properties on of the SIS (French Version) are largely consistent with English version (i.e., data show strong psychometric properties).

13. Lamoureux-Hébert, M., Morin, D., & Crocker, A. (2010). Support needs of individuals with mild and moderate intellectual disabilities and challenging behaviors. *Journal of Mental Health Research in Intellectual Disabilities, 3*, 67-84. doi: 10.1080/19315861003650558.

SIS and SIB-R data on 191 persons were analyzed. Data showed that high frequency in challenging behaviors was related to a need for greater support intensity, particularly social support and maintenance of emotional well-being.

14. Morin, D., & Cobigo, V. (2008). Reliability of the Supports Intensity Scale (French Version). *American Journal on Intellectual and Developmental Disabilities, 47*, 24-30.

Data were collected on 40 people to determine the interinterviewer (different interviewers independently interviewing the same respondents) and interrespondent (same interviewer interviewing different respondents on two occasions) reliability of the SIS (French Version). Findings showed reliability coefficients quite high, ranging from .79 to .92 for all subscales, and composite score coefficients of .91 (interinterviewer) and .92 (interrespondent).

15. Smit, W., Sabbe, B., & Prinzie, P. (2011). Reliability and validity of the Supports Intensity Scale (SIS) measured on adults with physical disabilities. *Journal of Developmental and Physical Disabilities, 23*, 277-287. doi: 10.1007/s10882-011-9227-3

SIS and Barthel Index (BI) data were collected on 65 adults with a primary disability of physical disability (approximately half of whom also were diagnosed with ID). The BI is a measure of practical skills (an adaptive behavior measure). For all six SIS subscales, higher levels of support needs were associated with greater severity of deficits in practical skills. The SIS subscales of Home Living, Community Living, and Health and safety had the strongest relationship with practical skill deficits.

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16. Tassé, M. J., & Wehmeyer, M. L. (2010). Intensity of support needs in relation to co-occurring psychiatric disorders. *Exceptionality, 18*, 182-192.

SIS data on 272 adults with ID were analyzed. Individuals in the sample with a psychiatric disorder presented greater supports needs in the area of problem behavior, but lower support needs in relation to medical conditions that impact physical health. There was no significant difference in the overall intensity of support needs between individuals with ID with a diagnosed psychiatric disorder and those without this diagnosis.

17. Thompson, J. R., Hughes, C., Schalock, R. L., Silverman, W., Tassé, M. J., Bryant, B., ... Campbell, E. M. (2002). Integrating supports in assessment and planning. *Mental Retardation, 40*, 390-405.

The rationale for creating a scale to measure the support needs of people with ID is provided, the process undertaken to create the SIS is described, and data from a pilot study of SIS psychometric properties are presented.

18. Thompson, J. R., Tassé, M. J., & McLaughlin, C. A. (2008). Interrater reliability of the Supports Intensity Scale (SIS). *American Journal on Mental Retardation, 113*, 231-237.

The interrater reliability of the Supports Intensity Scale (SIS) was investigated under the condition that interviewers had to have been trained and/or experienced in its administration and scoring. Both corrected and noncorrected Pearson's product-moment coefficients were generated to assess interinterviewer, interrespondent, and mixed interrater reliability. The correlation coefficients for the SIS Support Needs Index Score and SIS subscale scores were considerably higher than coefficients reported in the SIS Users Manual.

19. van Loon, J., Claes, C., Vandeveld, S., Van Hove, G., & Schalock, R. (2010). Assessing individual support needs to enhance personal outcomes. *Exceptionality, 18*, 193-202.
doi:10.1080/09362835.2010.513924

A case study is presented on how SIS findings can be used to guide the development of an individualized support plan.

20. Verdugo, M., Arias, B., Ibanez, A., & Schalock, R. L. (2010). Adaptation and psychometric properties of the Spanish version of the Supports Intensity Scale (SIS). *American Journal on Intellectual and Developmental Disabilities, 115*, 496-503. doi:10.135/1944-7558-115.6.496

Psychometric indicators of reliability and validity of the SIS (Spanish Version) reached and in some cases exceeded that of the English version.

21. Wehmeyer, M., Chapman, T. E., Little, T. D., Thompson, J. R., Schalock, R., & Tassé, M. J. (2009). Efficacy of the Supports Intensity Scale (SIS) to predict extraordinary support needs. *American Journal on Intellectual and Developmental Disabilities, 114*, 3-14.

Data on over 250 adults showed that SIS scores contributed significantly to a model that predicted greater levels of support need. Moreover, scores from different sections of the SIS made unique contributions to explaining variance associated with a variety of support need proxies. Also, data showed that the SIS measures a different construct than what is measured by traditional assessments of personal competence.

22. Weiss, J. A., Lunskey, Y., Tassé, M. J., & Durbin, J. (2009). Support for the construct validity of the Supports Intensity Scale based on clinician rankings of need. *Research in Developmental Disabilities, 30*, 933-941. doi:10.1016/j.ridd.2009.01.007

SIS scores on 50 individuals were compared with the rankings of support needs from 5 experienced clinicians. Data supported the concurrent validity of the SIS. Scores on the Home Living Activities subscale and the Exceptional Behavioral Support Needs section provided the strongest predictors of clinician rankings.