WhitePaper

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International Implementation of the Supports Intensity Scale™

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Editors' Note

The contributors to the AAIDD White Papers on the Supports Intensity Scale™ (SIS™) were sought out by the editors because of their demonstrated successful implementation of Supports Intensity Scale, the quality of their application, and the fidelity of their work to the conceptual and application model of SIS. It is important to realize that each implementation example reflects the initial phases of a long-term process of using and evaluating the efficiency, effectiveness, and impact of SIS. Thus, the implementation examples presented should be considered as current efforts, best practices, and benchmarks for evaluating future implementation efforts based on the judgment of the editors.

There is no intent on the part of the editors to suggest that the examples presented here are the only examples available; nor should they be considered as program standards. Knowledge is cumulative, and our primary intent is to share with the reader the current status of the multiple uses of SIS. It is our hope that the examples in the AAIDD SIS White Papers will serve as the basis for our increased understanding of how multiple entities can use SIS for the assessment of individual support needs and that we may use this information for multiple purposes, including individual support plans, staffing patterns, resource allocation, monitoring, and evaluating personal outcomes.

Introduction

In this White Paper, authors from seven international communities share their experiences in translating the SIS into their respective languages—French, Italian, Catalan, Complex Chinese, Spanish, Hebrew, and Dutch. Each translation was prepared by a team composed of university personnel, agency-based personnel, or both. These teams generally used Tassé and Craig's (1999) guidelines for the translation and adaptation of instruments, including the establishment of the reliability and validity of the translated instrument (American Psychological Association, 1999; Arnold & Matus, 2000). In addition, the teams and their leaders worked closely with American Association on Intellectual and Developmental Disabilities (AAIDD) concerning copyright and technical issues and with one or more of authors of SIS to ensure compliance with the *Supports Intensity Scale Users Manual* (Thompson et al., 2004), Web-based updates on administration and scoring procedures, and current best practices for standardization procedures and psychometric determinations.

This White Paper provides an overview of the context of each team's work, characterizes the general approach used, identifies any problems involved in translating SIS into a particular language, and reviews the intended use of the translated SIS. The work discussed in this paper is ongoing because each group expands its efforts in those areas (e.g., standardization, implementation, use, and evaluation) where more work is needed.

French Translation of the Supports Intensity Scale

by Mélanie Lamoureux-Hébert and Diane Morin

Approach Used for the French SIS

The translation of the Supports Intensity Scale (SIS) into French followed Tassé and Craig's (1999) seven-step committee method: (a) SIS translation and adaptation, (b) consolidation of the initial translation and adaptation by Committee 1, (c) validation of the initial translation and adaptation by a second independent committee (Committee 2), (d) review and adjustments by the two committees, (e) trial test of the translation with a small group (pretest), (f) review and adjustments of the pretest translation, and (g) final version validation and clinical trials. The standardization sample and procedure included the following:

- **Target persons**. The standardization sample (n = 245) consisted of 111 women and 134 men with intellectual and developmental disabilities. The mean age was 38 years, with a standard deviation of 13 years and an age range of 16 to 75 years. Forty-two percent were assessed with mild intellectual disability, 36% with moderate intellectual disability, 11% with severe intellectual disability, and 11% with profound intellectual disability.
- **Respondents**. Seventy-four percent of the respondents (two per client) were women and 26% were men. Their relationship with the target person lasted an average of 4.5 years (SD = 5.6 years, range = 4 months to 30 years). The length of their work experience with persons with intellectual and developmental disabilities was an average of 16.5 years (SD = 1.4 years). Respondents included educators or direct-support staff working in the assessed individual's residential or work setting (49%), social workers or case managers (39%), residential supervisors (9%), and professionals (3%).
- **Procedure**. The participants were recruited from nine developmental disabilities agencies located in six administrative regions in the greater Montreal area. In each center, a designated professional randomly selected participants from its consumer registry through a selection procedure that used SPSS randomly generated numbers. SIS interviewers included Mélanie Lamoureux-Hébert and seven other university students (four undergraduate and three graduate). Lamoureux-Hébert trained and supervised these students in conducting a semistructured SIS interview and completing the French version of SIS. They had all previously worked an average of 2 years (part-time) with persons with intellectual and developmental disabilities.

Psychometric Properties of the French SIS

- **Internal consistency**. Internal consistency of the French SIS was computed and then checked against the comparable psychometric property of the original SIS. These results indicate that the French SIS has excellent internal consistency (Guilford, 1965; Anastasi, 1994) across all subscales, with coefficients $\alpha \geq 0.89$. These results are comparable to those reported by Thompson et al. (2004) on the original SIS. The French SIS Support Needs Index score had a coefficient $\alpha = .98$.

- **Correlations with age**. Thomspon et al. (2004) reported no significant statistical correlation between an individual's chronological age and the original SIS scores. Similarly, correlations between the French SIS and age proved not to be statistically significant. According to Cohen's (1988) rule, all these correlations are considered so small (with $r \leq 0.10$) that we can conclude chronological age is not strongly correlated with an individual's intensity of support needs.
- **Correlations with levels of intellectual and developmental disability**. To estimate the French SIS convergent validity, correlations with an individual's level of severity of intellectual and developmental disability were computed using the French SIS subscale scores and the Support Needs Index score. As reported by the authors of the original SIS, these variables need to be correlated (Thompson et al., 2004). Our results indicate that all correlations between an individual's level of intellectual disability and the French SIS scores are significant ($p < 0.01$): with $rs \geq 0.50$, all are "strong correlations" according to Cohen (1988). These correlations are higher than those reported with the original version of SIS.

  T-tests were also computed to determine if the mean scores on the French SIS with our sample were significantly different from the mean scores obtained with the standardization sample on the original SIS (Thompson et al., 2004). All the mean differences are significant at $p < 0.001$ and explain 2% to 12% of the variance. This suggests that the standardization sample of the original SIS may have had higher support needs that our sample on the French SIS.
- **Reliability**. Test-retest, inter-respondent, and inter-interviewer reliability of the French SIS are presented in Tables 1 and 2.

TABLE 1

Reliability Study Procedure (French SIS)

Reliability	Interviewers	Respondents	Delay
Interrespondent reliability	Interviewer 1	Respondent 1 Respondent 2	Day 1 1 to 7 days after day 1
Interinterviewer reliability	Interviewer 2	Respondent 1	1 to 7 days after day 1
Test-retest reliability	Interviewer 2	Respondent 2	3 weeks after day 1

TABLE 2

Support Needs Scale and SIS Support Need Index Score Correlations (French SIS)

	Interinterviewer	Test-retest	Interrespondent
Home living	0.92	0.85	0.88
Community living	0.82	0.77	0.87
Lifelong learning	0.85	0.75	0.87
Employment	0.90	0.75	0.87
Health and safety	0.79	0.81	0.91
Social	0.79	0.68	0.85
Support Needs Index	0.91	0.84	0.92

All correlations are significant at the $p = 0.01$ level (2-tailed).

Italian Translation of the Supports Intensity Scale

by Mauro Leoni and Luigi Croce

Approach Used for the Italian SIS

After the translation of the 10th edition of Supports Intensity Scale (SIS) into Italian by Vannini Editrice, the challenge was to promote the application of the system's models and knowledge within Italy. We, the authors of this section, were also the translators of the Italian edition and became referees for creating an approach to meet this challenge. We began with intensive training courses for employees of Italian service organizations to motivate them to use SIS and the *Supports Intensity Scale Users Manual* (Thompson et al., 2004) as practical tools for diagnosis and needs evaluation.

Although fascinated by SIS's rationale and technical properties, we were doubtful about its successful application in Italy because each Italian service uses different assessment instruments and theoretical models for people with intellectual and development disabilities. Specifically, each service has its own assessment battery and uses a personal model for intervention based mainly on different theoretical approaches. To overcome the challenges posed by this multifaceted approach, we introduced SIS slowly, showing its relevance in our specific context. We determined that an adaptation research study seemed the best systems-level change model. ANFFAS, one of the most important associations serving families with members who have intellectual and developmental disabilities, agreed to participate by planning a multicenter survey based on its contacts with approximately 200 services and 8,000 families in all regions of Italy. The purpose of this project, which was supported a grant from by the Italian Ministry of Social Solidarity, was to translate SIS. We began with a translation of a draft of the form, which had been discussed in a small consensus meeting among the referees. The form was modified and reviewed for a few months. Next, we started training courses for employees of organizations providing services for people with intellectual and developmental disabilities. Professionals were encouraged to use the SIS draft as an exercise and as the basis for discussions of the potential value of a multidisciplinary approach to the persons they served.

The most basic adaptations that occurred in translation were the result of cultural differences. The following are examples of the more relevant differences:

- **Home living activities**. Cooking, cleaning, and so on have a slightly different pattern. As a result, even the "moral" value commonly associated with these activities changes.
- **Employment**. Because the National Health System supplies health and educational intervention as well as financial support for persons with intellectual and developmental disabilities, working is not a relevant consideration for this population.
- **Protection and advocacy**. There is little experience in advocacy activities for this population because of the prevailing health model and because of the widespread tendency to segregate rather than include this population.

Other changes derived from the differences in the development and culture of services for people who have intellectual and developmental disabilities. For example, (a) a number of large residential institutions still impede planning based on objectives and domains related to quality of life (QOL); (b) the general approach to services is based on an assistance model that prevents movement toward a support-focused model; and (c) theoretical ideas related to psychodynamic psychological models that are still present in the field of intellectual and developmental disabilities make it difficult to implement evidence-based practices that could sustain quality of life planning based on SIS.

After weighing these considerations, the translation of the *Supports Intensity Scale Users Manual* (Thompson et al., 2004) was completed in April 2007; the revision was completed by the two editors in June 2007. In the meantime, the publisher, Vannini Editrice, prepared an innovative graphic project that was designed exclusively for the Italian edition. The SIS (Valutazione dell'intensità dei bisogni di sostegno) became available in July 2007 with a special kit that contained the *Supports Intensity Scale Users Manual* (Thompson et al., 2004) and 25 forms.

Experience to Date and Use of the Italian SIS

In the future, SIS-related information will be used at three levels: the individual, the agency, and the wider system. Each is described briefly below.

- **Individual**. This level of use is the result of the multicenter survey financed by the Italian Ministry of Social Solidarity and implemented in collaboration with ANFFAS. Throughout Italy, 1,600 clients with intellectual and developmental disabilities were assessed using SIS. The data were used to produced Italian sample statistical norms for Section I with standard scores computed for each of the six activity subscales. Combined with similar data for Sections II and III, the intent is to promote the use of these data as a basis for developing individual support plans (ISPs).
- **Agency**. At the agency level, a large residential service (Istituto Ospedaliero di Sospiro, Cremona) has implemented SIS as part of the assessment included in the assessment folder of each client. The agency also uses the 2002 *Mental Retardation: Definition, Classification, and Systems of supports* (Luckasson et al., 2002) and the *Supports Intensity Scale Users Manual* (Thompson et al., 2004) as a major framework for each objective implemented by ward managers, case managers, and professionals. Sospiro, with its 11 residential services, will be the first large example of summary statistics for an agency or organization clientele and for tentative use in changing staffing, budgeting, staff training, and program and strategic planning over time.
- **Wider system**. As a final part of the survey financed by the Italian Ministry of Social Solidarity, the major objective of a national congress and consensus in the first half of 2008 was to discuss summary statistics resulting from the study to implement regional systems to guide resource allocation, research and evaluation, and systems planning.

Catalan Translation of the Supports Intensity Scale

by Climent Giné

Approach Used for the Catalan SIS

The Catalan translation of the Supports Intensity Scale (SIS) was prepared by the Research Group on Disability and Quality of Life: Educational Aspects, which is part of the Blanquerna Faculty of Psychology and Educational and Sports Sciences at Ramon Llull University in Barcelona. The Catalan adaptation was intended to provide professionals and organizations with an instrument that measures the support intensities of individuals. As a result, they would be able to develop ISPs, resource allocation models, and evaluation systems. Catalonia is an autonomous community in Spain with seven million inhabitants who have their own language, Catalan. The region also has its own government, with a wide range of competencies. The cultural tradition and linguistic individuality of the region made a Catalan version of SIS essential. The project was made possible thanks to funding from the Federació Catalana Pro Persones amb Retard Mental (APPS).

The research group was composed of scholars and professionals from services for people with intellectual and developmental disabilities. The first initiative was a 3-day training workshop in which research group members became familiar with SIS (its background, construction, scoring systems, administration, and possible uses) and discussed the contribution of SIS-related information to the quality of life of people with intellectual and developmental disabilities. As for the translation, the following steps were taken:

- The Faculty's Language Service was asked to translate the original *Supports Intensity Scale Users Manual* (Thompson et al., 2004), questionnaire, expanded items, and FAQs.
- The translation was submitted to expert judges, and appropriate revisions were made.
- Finally, after introducing the Catalan adaptations into the *Supports Intensity Scale Users Manual* (Thompson et al., 2004), two professionals who planned to use the materials in the future were asked to revise all the materials to ensure their comprehension.

Standardization Procedure of the Catalan SIS

The Catalan adaptation of SIS was applied to a sample of 352 people from all parts of Catalonia. With administrative services provided by the Autonomous Government, data were collected during the summer and autumn of 2006 from a group of centers and institutions representing a wide variety of services for people with intellectual and developmental disabilities, including homes, residential homes, and special work centers. First, the APPS director and the research group's main researcher, who was

responsible for SIS adaptation to the Catalan population, wrote to the people in charge of these centers asking for their cooperation and inviting them to participate in the process. Those who accepted—and almost all did—were asked to select professional staff members to administer SIS. Then, the professionals who were to act as interviewers attended an intensive training course given by members of the research group. The course explained the theoretical basis of SIS, the structure of the scale, and the interviewing and scoring system. Moreover, a practical SIS application and scoring exercise was conducted. At the end of the training course, all participants received the materials to apply the scale and two informed consent forms (one for the user, or client, and one for the person or persons who would respond).

The centers, following guidance from the research group, selected users for SIS application. They had a maximum of 3 months to apply the scale and return the documentation (answer sheets and signed consent forms) to the research group. During this period, research group members provided support by phone, by e-mail, or in person.

Most of the 84 women and 16 men selected as interviewers were psychologists, and the majority had 3 or more years of experience in the field. The clients (n = 352) had the following major characteristics: (a) there were an equal number of men and women; (b) the majority had IQ scores between 36 and 69 (c) they were between the ages of 30 and 69; (d) they generally lived in residential homes, in generalized support homes, or at home with their families; (e) their related disabilities were visual impairment, mental illness, physical disability, chronic health conditions, or epilepsy (12% to 16% per condition); (f) most were employed in an occupational or special work center; and (g) 75% were from an urban area.

Psychometric Determinations of the Catalan SIS

Before the calculation of Cronbach's (1951) alpha coefficients, Pearson correlation coefficients were calculated between each SIS subscale and the age and gender of sample participants. None of these correlations exceeded 0.16 ($p > 0.05$). To determine the degree of homogeneity, Cronbach's alpha coefficients were calculated for each SIS subscale and overall score. These coefficients are home living (0.93), community living (0.96), lifelong learning (0.96), employment (0.96), health and safety (0.92), social activities (0.94), and total (0.97).

In conclusion, work on the development of Catalan norms and additional reliability and validity studies is ongoing. We appreciate and understand the need by professionals and researchers to use the Catalan version of SIS for individual, agency, and systems-level purposes as described in the 2004 *Supports Intensity Scale Users Manual* (Thompson et al., 2004). The supports assessment instrument is now in place for that use to occur.

Complex Chinese (Taiwanese) Translation of the Supports Intensity Scale

by Sue Holmes

Approach Used for the Complex Chinese SIS

The Complex Chinese translation of the Supports Intensity Scale was introduced in Taiwan by the Syinlu Social Welfare Foundation at the beginning of 2006 at three workshops with approximately 90 participants each. Because SIS is a totally new concept and a different measurement tool in the Taiwanese environment, we have had to address a number of challenges related to cultural differences, translation requirements, the need for standardization, and encouragement of stakeholder buy-in during the 2 years since its translation and initial introduction.

Challenges Presented by SIS in Taiwan

- **Cultural differences**. Challenges related to cultural differences can be stated from three perspectives. First, the conceptual framework of SIS is based on providing greater participation for people with intellectual disabilities to improve their quality of life and to empower self-determination. This social construct, although unfamiliar to us, is very important. This unfamiliarity affects the implementation of SIS because the people of Taiwan have a different way of thinking and different life experiences. Some of the life activities in SIS are not relevant, especially Part C: Lifelong Learning Activities and Section II: Supplemental Protection and Advocacy. Users of SIS all responded that they had difficulty in conceptualizing and applying these two areas.

  The second challenge relates to social welfare systems. The Taiwanese system designs are different from those in Western countries, and community-based programs have just started in Taiwan. At present, most people with intellectual and developmental disabilities either stay at home or are placed in institutions. Staff members in these institutions think "Part B: Community Living Activities" and "Part C: Lifelong Learning Activities" are not appropriate for them. This perception might affect the content validity of SIS.

  The third challenge relates to the fact that parents' opinions have greater influence than those of the individual. In Eastern countries, parents or family members are powerful. They take charge of everything. Parents are more concerned about safety and security than a person's multidimensional quality of life, so when parents are respondents, they tend to underestimate the intensity of needed support.

- **Translation**. Finding the right word when translating is always difficult, but that is not the major problem. The trouble is that words that seem to be synonymous, such as "accessing" and "using," are actually different to some degree. Therefore, we need to provide further explanation of these word equivalencies during interviews.

- **Standardization**. We have just started to use SIS and need more practice. As we become more confident in implementing SIS, extensive work will begin to standardize the instrument.
- **Stakeholder buy-in**. Since 2001, the Taiwan Community Living Consortium has been the leading advocate for community living options for people with intellectual and developmental disabilities. A recently begun pilot project, with funding from the Department of the Interior, encourages agencies to provide community living services for people with intellectual and developmental disabilities by helping individuals rent a house and supporting them so they can live in the community. This project provides clients with an alternative to institutionalization, which people may come to realize is not the only choice. As a result of this project, 24 community-living programs are now available throughout Taiwan. The agencies involved in this project are encouraged to use SIS as a measurement tool.

Anticipated Use of the Complex Chinese SIS

Perhaps because of our unfamiliarity with SIS, administrative activities have generally taken a comparatively long time to complete, that is, between 3 and 7 hours. As a result, professionals have doubted its convenience and appropriateness. We have established discussion groups to gather information about the difficulties and problems agencies face when they use this new assessment tool and hope that invited professionals from the United States can help with interviewer training. Through these efforts, we hope to find a way to encourage people and agencies to use this new tool so that we can truly measure the support needs of people with intellectual and developmental disabilities. Once sufficient data have been gathered, we can develop our standardization norms. Our policy, resource allocation, funding, and project plans can then be based on SIS-related information.

Spanish Translation of the Supports Intensity Scale

By Miguel A. Verdugo

Approach Used for the Spanish SIS

The translation and adaptation of a questionnaire to a different cultural context requires, first, that there is linguistic, semantic, and cultural equivalence and, second, that there is an evaluation of its psychometric properties. This section of the White Paper summarizes the research done at the Institute on Community Integration (INICO) in Spain in translating, standardizing, and adapting the Supports Intensity Scale (SIS) to the Spanish environment (Verdugo, Arias, & Ibáñez, 2006, 2007). That translation has been published and is being applied in Spanish-speaking countries throughout the world (Verdugo et al., 2007). The translation and adaptation of SIS was carried out in five stages: initial translation, inverse translation, concordance and synthesis by a committee of experts, initial validation of the provisional version, and compilation of documentation by the coordinating committee to complete the adaptation process. We are now working to create a growing awareness of the importance and use of the tool among potentially interested professionals, organizations, and agencies.

Validation and Standardization of the Scale in the Spanish SIS

Validation

The definitive version of SIS was applied to a sample of 885 individuals with intellectual and developmental disabilities. The participants were selected through a random nonprobalistic sampling based on the access and availability of the professionals at the centers attended by persons with disabilities. The average age of the participants was 34.6 years, and most of them were in the 20 to 40 age range. More than 90% of the participants had an IQ below 51.

The validation process had three stages:

1. **Initial contact and collaboration**. Initial contact was established with directors, staff, and professionals in each center. We asked for their collaboration, explained the objectives of the study, and indicated the characteristics of the sample. We also guaranteed total confidentiality and offered final results.
2. **Application of the scale**. The scale was administered once we had a general consent. To optimize the professionals' available time, we decided that they should manage the scale in the time frame that suited them best. Therefore, after training each professional in how to apply the scale, he or she was given an instruction notebook (taken from SIS) and delivery dates for the completed profile data or form. Dates were set for the first application (pretest) and for the second one (posttest), with a 3-week time frame between them.

3. **Data analysis and study of the scale's psychometric properties**. To analyze data and carry out validity reliability studies, we used different statistical packs, either SAS v. 9.0 (The SAS Institute, 2005), SPSS v. 14.0 (SPSS, 2006) or STATISTICA v. 7.0 (StatSoft, 2006).

Standardization

The standardization process included different reliability analyses: internal consistency, reliability based on the scale's factorial structure, test-retest reliability, agreement among evaluators, and concordance among testers. In addition, the following validity types were also determined: (a) content validity (the original SIS has been further developed by having all 49 items evaluated by expert judges); (b) criteria validity (through a comparison between the scores obtained in the different subscales and estimations of supporting needs calculated by external evaluators); (c) construct validity (relation between scores and age, interrelations between the scales, relation with the disability level and the level of adaptive behavior, relation between the evaluated and perceived support needs, and correlations among each scale's items and the corresponding total and exploring factorial analysis of the scale's structure); and (d) discrimination validity (establishing the discrimination values of the subscales resulting scores for the different estimation groups of supporting needs and adaptive behavior).

In every case, the results have been positive: the Spanish adaptation of SIS shows reliability and validity properties that have reached and in some cases exceeded those reported by the authors of the original SIS (Thompson et al., 2004). Therefore, the current Spanish version of SIS can be regarded as fulfilling the objectives for which it was initially designed: an evaluation tool to determine the support needs of individuals with intellectual and developmental disabilities, a useful planning tool for ISP development and implementation, and a potential tool to include in resource allocation and funding models (Verdugo et al., 2007).

Hebrew Translation of the Supports Intensity Scale

by Yuval Ekstein

Approach Used for the Hebrew SIS

- **Individual level**. Data related to the Supports Intensity Scale (SIS) are used to develop the individual's ISP. Following SIS assessment, the client is asked to help develop the basic structure of the support plan with reference to specific activities rated on the scale. The goal is to arrive at a consensus for the plan between the client and the support coordinator. Following the drafting of the plan, the support coordinator consults with other relevant staff members and the director regarding various support plan alternatives. After this consultation, the director approves the plan and the client authorizes it. Thereafter, there is regular follow up and direction of the staff members responsible for daily care, revision and modification of the support plan as necessary, semiannual interim evaluations, and a renewal of the support plan after one year based on an updated SIS administration.
- **Agency level**. The Beit Ekstein House is rooted in the vision of providing continuous improvement of the quality of life for people with special needs, viewing the person as part of his or her family, integrating the person into his or her natural community, and changing the community's opinions and attitudes regarding people with special needs. SIS and the supports paradigm allow and encourage us in the development of a uniform and consistent lexicon and the implementation of the agency's vision. This has also necessitated the creation of new positions, new definitions, and a new working methodology that ultimately led to the design of appropriate training programs.

Implementation of SIS and the quality of life model is a gradual process involving various services, such as living facilities, employment, and education. This process includes the training of directors, support coordinators, and staff members of the various facilities. Thus far, we have used this program model only within the framework of community-based residential facilities. These facilities serve various populations, including people with intellectual and developmental disabilities and people with autism and Asperger syndrome. Directors and coordinators participate in a day-long, intensive quality of life training program (with activities that demonstrate the concept) and on-the-job training in the use of SIS (with actual cases). In addition, after the day-long training, coordinators receive preliminary practical training and experience in completing SIS and are given immediate instruction and feedback regarding their performances.

We have also found that successful implementation of the model requires a restructuring of a number of key positions related to the support concept. Chief among these are the following:

- **Support coordinator**. After defining the functions of the support coordinator, the social worker, who is a staff member in all residential frameworks in Israel, was deemed the most appropriate professional for the job. Therefore, within the new system, the social worker is a priori defined as the support coordinator. The

coordinator's tasks include collecting data for understanding and assessing the quality of life and for establishing the person's support needs, constructing the support plan, and implementing the plan and providing professional guidance and follow-up.

- **Support provider**. A support provider is any person who participates in the support plan of the client (e.g., counselors, family members, or therapists).

These two key positions are operationalized further through (a) work routines, including regularly scheduled meetings devoted to the topic of the support system between the director and coordinator, between the coordinator and support providers, and among staff members, and (b) training tools and strategies designed to ensure that support providers have the knowledge and skills to successfully implement the ISP and to enhance personal outcomes.

In summary, the application of the working model in community-based residential facilities has clear advantages, but it also presents various difficulties in implementation. Use of SIS facilitates the creation of a support plan that covers all aspects of the person's life through a support network with a holistic approach and consideration of the individual's needs. SIS has been used for a varied and heterogeneous population. Difficulties have arisen because of the lack of specific adaptation to various segments of the population. This is the result of the different levels of functioning of clients as well as the various types of living environments (assisted living facility, supportive residential facility, and structured independent living in the community).

When there is a large gap between the need for intensive support in many aspects of the person's life and the level actually provided, it is problematic to base the support plan mainly on SIS. These gaps can arise for various reasons, such as the client's specific abilities, his or her motivation to cooperate, and the allocation of resources. Furthermore, specific sections of the SIS questionnaire are problematic. For example, in the section on employment, various functions are missing that therefore limit the ability to properly structure support in this area. Finally, the section on lifelong learning includes details from other areas that are poorly delineated.

Dutch Translation of the Supports Intensity Scale

by Wil Buntinx

Approach Used for the Dutch SIS

The translation of the Supports Intensity Scale (SIS) into Dutch began immediately after publication of the original SIS in 2004. This literal translation has been made twice and independently, consistent with the method suggested by Tassé and Craig (1999). No significant culturally related problems were found, although for some items, local equivalent concepts or names were used. In the Dutch *Supports Intensity Scale Users Manual*, nearly all tables and figures in the 2004 *Supports Intensity Scale Users Manual* (Thompson et al., 2004) are mirrored by a counterpart that is based on data from our psychometric studies. The Dutch *Supports Intensity Scale Users Manual* and forms were published by NGBZ (the Dutch association of professionals in services for persons with intellectual and developmental disabilities) in September 2006. The studies referred to in this contribution were conducted at the Department of Health Organization, Policy, and Economics at Maastricht University.

Studies Conducted for the Dutch SIS

Five research projects, or studies, have been conducted to date. Study 1 included 101 clients with intellectual and developmental disabilities (18–60 years of age) at a Dutch residential community service provider. Levels of intellectual and developmental disabilities were mild (40%), moderate (20%), severe (15%), profound (15%), and unavailable (10%). The purpose of the study was to investigate reliability, validity, and usefulness for resource allocation applications within a service provider organization. Study 2 included 91 clients receiving services from different providers in the Dutch province of Limburg. This study focused on the relation between SIS outcomes and allocated client budgets by the official Dutch funding agency. The age span of this group was from 18 to 73. Levels of intellectual and developmental disabilities were mild (35%), moderate (44%), severe (8%), and profound (13%). Study 3 involved 567 clients with different home living arrangements. The unit of analysis was both the individual and the group of clients for each of 19 home living support arrangements. The age span was from 17 to 81. Levels of intellectual and developmental disabilities were mild (52%), moderate (46%), and severe (2%). The purpose of this study was to investigate the usefulness of SIS for individual support planning and for potential use in resource allocation. Study 4 included 685 clients representing 69 residential arrangements (48 campus-based and 21 community-based). Levels of intellectual and developmental disabilities were mild (13%), moderate (44%), severe (25%), and profound (18%). The unit of analysis was the team responsible for specific home living arrangements. The research question was whether personnel costs of community home living arrangements were greater than those of campus arrangements. Study 5 was a major standardization, reliability, and validity study in Flanders (Belgium). The study involved 15,224 persons with intellectual and developmental disabilities between 20 and 80 years of age. Levels of intellectual and developmental

disabilities were mild (22%), moderate (35%), severe (28%), and profound (15%). The reliability and validity data from Study 5 are summarized in the White Paper *Psychometric Properties of the Supports Intensity Scale*.

The Dutch normative sample has been completed.

Applications of the Dutch SIS

To date, there have been six applications in the Netherlands of SIS-related data. First, SIS is administered to identify areas of support needs that so far have not received attention in the ISP. Second, SIS data are used to obtain an individual profile of support needs. Third, at the agency level, group profiles of clients from different day care centers and living arrangements are compared in regard to need status level and currently received services. Fourth, SIS profiles are used to sensitize managers to the diversity of client needs across specific divisions or units of the organization. Fifth, support needs intensity is linked to available resources within a number of potential funding models being investigated. Sixth, the SIS index is used to compare direct support personnel costs in a number of community settings. The overall purpose of these application studies is to examine the components of SIS for use in situations of policy and practice.

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Useful Web Sites

Information on the Supports Intensity Scale ..... www.siswebsite.org

Electronic *SIS Vantage* newsletter (Free sign-up) ..... http://www.siswebsite.org/Newsletter/

SIS presentation ..... http://www.siswebsite.org/galleries/default-file/SISpresentation.pdf

The American Association on Intellectual and Developmental Disabilities ..... http://www.aaidd.org

Electronic *AAIDD F.Y.I.* newsletter (Free sign-up) ..... http://www.aaidd.org/FYI/

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