

International Adaptation and Use of the Supports Intensity Scales

James R. Thompson, PhD.

Reykjavik, Iceland

June 30, 2016

Support Intensity Scales

- Original *Supports Intensity Scale* published in 2004
- *Supports Intensity Scale – Adult Version* published in 2015
- *Supports Intensity Scale – Children’s Version* published in 2016



According to the AAIDD, a SIS

Is being used (in some form) in:

Australia	Israel
Belgium	Italy
Brazil	Japan
Canada	Korea
Catalonia	Mexico
China	Netherlands
Croatia	Portugal
Czech R.	Spain
Greece	Taiwan
Iceland	U. K.
Ireland	U. S.

Has been translated to:

Catalan	Hebrew
Complex Chinese	Italian
Croatian	Japanese
Czech	Korean
Dutch	Icelandic
French	Portuguese
Greek	Spanish

External Validity of Assessment Tools

- Campbell and Stanley (1966) call for evidence of “external validity” - the applicability of assessments across a variety of languages, countries, and cultures.
- If items on an assessment can be shown to be universal or culture-free properties, they are said to have etic properties
- SIS scales have shown strong etic properties

It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



Would you like some eggplant?



It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



Would you like some eggplant?



An egg is not a plant!

It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



Would you like some eggplant?

No thank you, Dear



It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



Would you like some aubergine?



It all starts with translation

- Items may actually have etic qualities, but if their meaning gets lost in translation, they will appear to be culture specific.



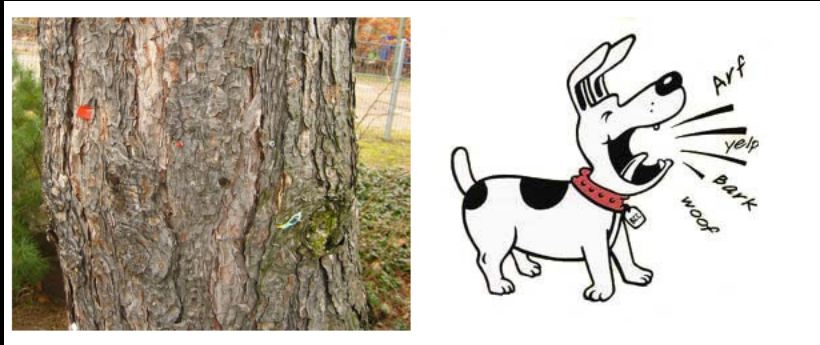
Would you like some aubergine?

That would be lovely, Dear.



Translation issues (some examples)

- Not every word is going to have one and only one meaning (both in original and corresponding language)



Translation issues (some examples)

- Language structures vary considerably – for example, in English the simplest structure is Subject-Verb-Object – but, in Farsi the simplest structure is Subject-Object-Verb
 - *Je ne le lui ai pas envoyé* - directly translated to English means “I not it to-him have not sent”, Google Translate indicated it means “I would not have sent him” but the real meaning is “I didn’t send it to him”
- Idioms are very difficult to explain:

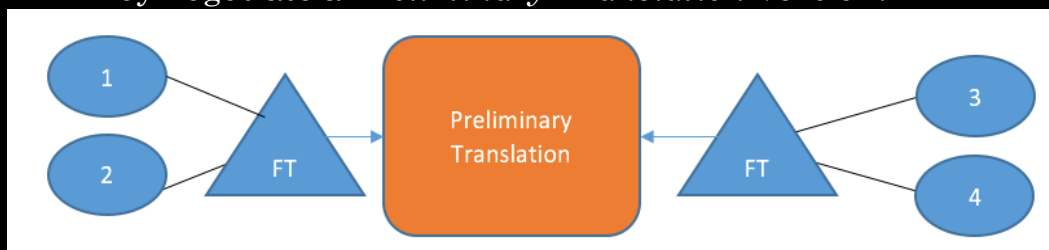
“He took him for a ride”

Golden Rule: Translated Assessment Scales

*When translating or adapting test items from one language or culture to another, the test development must attempt to reproduce the **meaning** of each item stem; the goal is not to produce a mere literal – word for word – translation, but rather to reproduce the meaning.*

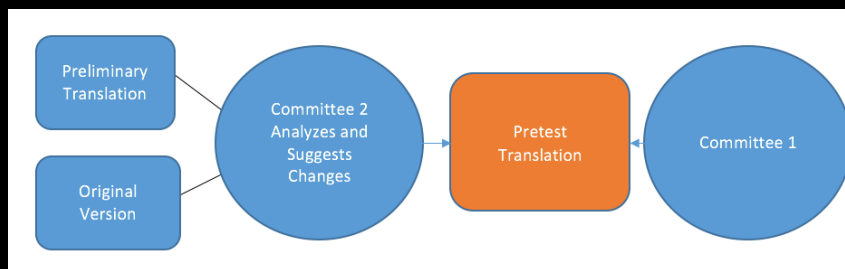
Translation – The Right Way to Proceed (Tasse & Thompson, 2010)

- Need to involve content experts, translation experts, and potential users in a multi-step, committee approach.
- Phase 1 – Committee 1 – 4 people make up 2 teams – the 2 teams independently translate the scale, and then meet with one another to discuss their results. They negotiate a *Preliminary Translation* version.



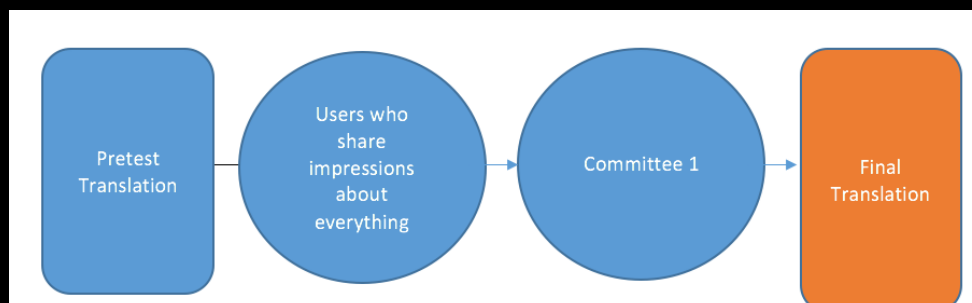
Translation – The Right Way to Proceed (Tasse & Thompson, 2010)

- Phase 2 – Committee 2 – at least 2 people, but could be more – are given the *Preliminary Translation* from. Committee 2 verifies the translation equivalence, grammatical structure of the translation, and cultural appropriateness by comparing it to the original scale. Committee 2 meets with Committee 1 and they negotiate a revised version, called the *Pretest Translation*.



Translation – The Right Way to Proceed (Tasse & Thompson, 2010)

Phase 3 – The Pretest Translation is given to group of users; people receive instructions on completing the assessment, and proceed to complete several assessments. The Users are asked to evaluate the clarity of the assessment instructions, item stems, scoring scale, and instrument presentation. Users might provide their feedback through a Likert-scale and/or focus group. Committee 1 takes the feedback from the users and creates a Final Translation version on which field-test data will be collected.



Psychometric Findings (Reliability) from Translated Versions of the SIS

Source	Translated Language	Findings
Arkelsson & Sigurdsson (2014)	Icelandic (psychiatric disabilities)	<u>internal consistency</u> : alphas ranged from .78 to .97
Arkelsson & Sigurdsson (2014)	Icelandic (motor disabilities)	<u>internal consistency</u> : alphas ranged from .90 to .98
Bossaert et al., 2009	Dutch (no people with ID included in study)	<u>internal consistency</u> : alphas ranged from .58 to .94
Chou et al., 2013	Chinese	<u>internal consistency</u> : alphas ranged from .87 to .93
Claes et al., 2012	Dutch	Inter-respondent reliability (consumer v staff) <i>rs</i> ranged from .31 to .80; staff consistently rated support needs as “more intense” compared to consumers

Psychometric Findings (Reliability) from Translated Versions of the SIS

Source	Translated Language	Findings
Jenaro et al., 2011	Spanish (mental health/psychiatric)	<u>internal consistency</u> : alphas ranged .83 to .94; interrater <i>rs</i> from .67 to .98
Lamoureux-Hebert & Morin, 2009	French	<u>internal consistency</u> : alphas ranged .89 to .98
Morin & Cobigo, 2009	French	interinterviewer and interrespondent reliability <i>rs</i> ranged from .79 to .92 and .87 to .92 for the two conditions respectively
Ortiz et al., 2010	Spanish	<u>internal consistency</u> : alphas ranged from .95 to .99

Psychometric Findings (Reliability) from Translated Versions of the SIS

Source	Translated Language	Findings
Smit et al., 2011	Dutch (physical disabilities)	<u>internal consistency</u> : alphas ranged from .71 to .98
Verdugo et al., 2010	Spanish	<u>internal consistency</u> : alphas ranged from .90 to .99. <u>test-retest</u> : <i>rs</i> ranged from .84 to .98); <u>interrater</u> : <i>rs</i> ranged from .60 to .86); <u>split half</u> : coefficients ranged from .86 to .98.

Psychometric Findings (criterion related validity) from Translated Versions of the SIS

Source	Translated Language	Findings
Arkelsson & Sigurdsson (2014)	Icelandic (psychiatric disabilities)	coefficients between SIS-A and a 7-level service measure from .44 to .61
Arkelsson & Sigurdsson (2016)	Icelandic (motor disabilities)	coefficients between SIS-A and a 7-level service measure from .60 to .80
Claes et al., 2009	Dutch	coefficients between SIS-A and Vineland-Z ranged from .37 to .89
Jenaro et al., 2011	Spanish (mental illness)	coefficients between SIS-A scores and GAF scores ranged from .49 to .62
Lamoureux-Hebert et al., 2009	French	coefficients between SIS-A scores and severity of intellectual disability classification ranged from .56 to .69

Psychometric Findings (criterion related validity) from Translated Versions of the SIS

Source	Translated Language	Findings
Lamoureux-Hebert et al., 2010	French	coefficients ranged from .18 to .36 between SIS-A scores the SIB-R subscales
Ortiz et al., (2010)	Spanish	coefficients ranged from .57 to .67 between SIS-A scores and GAF scores
Verdugo et al., (2010)	Spanish	coefficients for "SIS-A/Rater Estimates" scores ranged from .64 to .93; coefficeints for "SIS-A/ICAP" scores ranged from .49 to .59

Psychometric Findings (construct validity) from Translated Versions of the SIS

Source	Translated Language	Findings
Bassaert et al. (2009)	Dutch	Coefficients ranged from .71 to .74 between SIS-A scores and service score measures
Chou et al., 2013	Chinese	coefficients ranged from ranged from .64 to .79. between SIS-A scores and IADL measures; SIS-A had much higher correlations than medical diagnostic information
Jenaro et al., 2011	Spanish (mental illness)	coefficients ranged from .17 and .23 for the SIS-A and mental illness service measures

Psychometric Findings (construct validity) from Translated Versions of the SIS

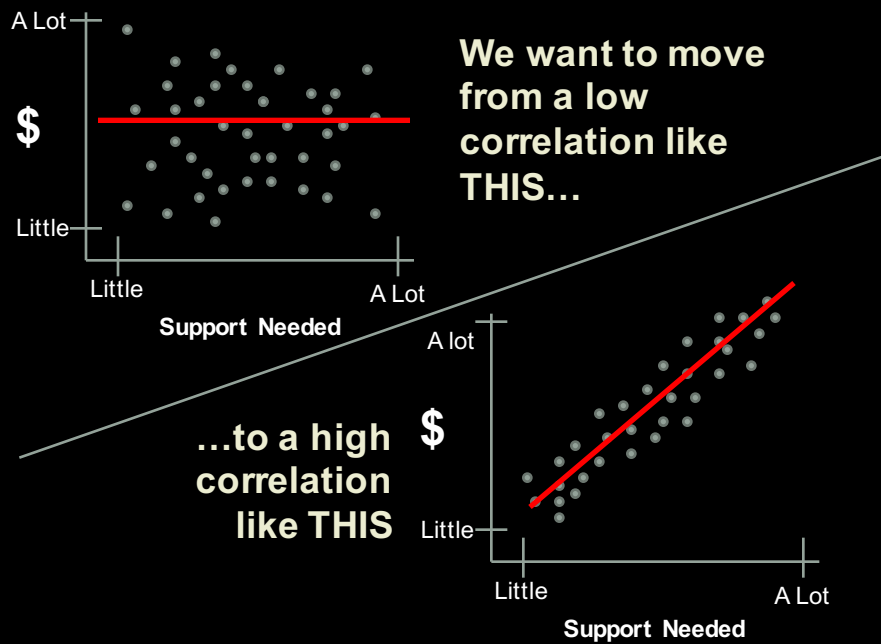
Source	Translated Language	Findings
Kuppens et al. (2010)	Dutch	Goodness-of-fit tests associated with CFA provided evidence for a 6-factor model based on the subscale structure of the SIS-A. Invariance analysis revealed the 6-factor model was robust across subgroups
Smit et al. (2011)	Dutch	SIS-A SNI scores predicted membership in one of three groups: a group with only one motor disability, a motor disability plus one other disability, a motor disability plus two or more other disabilities

Practical Applications of SIS assessment results internationally

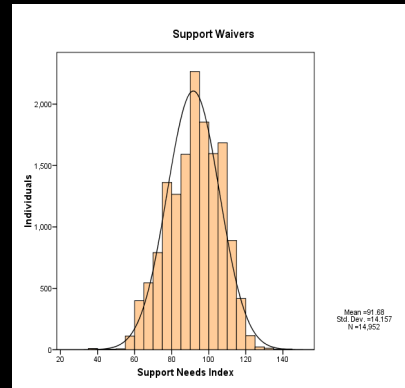
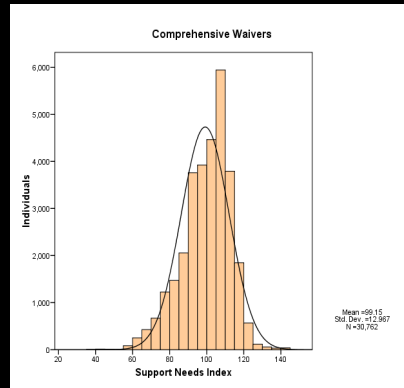
- Resource Allocation (Canada and the U.S.)
- Planning (the Netherlands)

Values underlying resource allocation

- Efficiency
- Equity
- Stakeholder Involvement
- Transparency
- “It is impossible to individualize services and supports without individualized funding”
(flexibility in how dollars are used, funding “people” instead of programs)



HSRI finds SIS results are useful for two funding streams

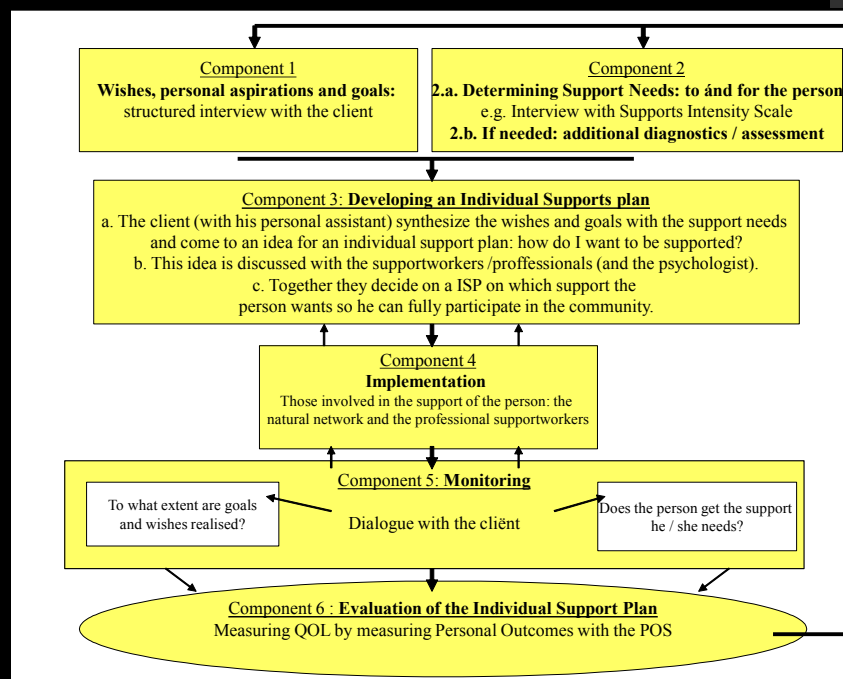


24/7 Comprehensive funding SNI 99.15 avg Support funding SNI 91.68 avg

Warning – Considering only one source of information to determine funding is a recipe for disaster! SIS should be used with other information to determine funding amounts.

Supports Planning in Arduin (NL)

The critical assumption is that supports, support needs, and QOL are related, and are dynamic. The alignment of the right supports with supports needs with result in enhanced QOL.



International Adaptation and Use of the Supports Intensity Scales

James R. Thompson, PhD.

Reykjavik, Iceland

June 30, 2016