

Evaluating the Inter-Respondent (consumer vs staff) and Construct Validity (SIS vs Vineland) of the SIS on a Dutch Sample.

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Overview presentation

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METHOD

RESULTS

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Introduction

- The reliability of client versus staff judgments on the SIS has not been evaluated, although this is important because of the increasing consumer-driven approaches towards services.
- The SIS' construct validity has not been studied yet in a non-English speaking sample, although the SIS has been translated into 13 languages.

Two major purposes:

- (a) to determine the inter-respondent reliability (staff vs client);
- (b) to evaluate the construct validity.

(both in a Dutch-speaking sample)

- Hypotheses:
 1. Client vs. staff reliability coefficients should be positive and significantly different from chance, based on an initial pilot study (Claes et al., 2007) and previously published work on consumer-based survey administration and data source (Bonham et al., 2004; Schalock et al., 2000);
 2. (a) Correlations between SIS domain scores and Vineland factor scores should be negative, consistent with the data reported in the SIS Manual (Thompson et al., 2004) and more current psychometric studies (Schalock et al., 2008). (b) Since SIS-subscales measure different aspects of support provision, results on the SIS should correlate significantly with each other (Thompson et al., 2004, p 109).

Study 1 Inter-Respondent (client vs staff) Reliability

Caregiver and client perspectives

- What is the extent to which client and staff perspectives coincide ?
- If staff assessment of support needs ranks systematically different than client ranks, caution is needed in the way the Supports Intensity Scale is administered.

Participants

- VZW Tordale
- Sample:
 - 29 persons
 - 7 F, 22 M
 - Mean age: 32
 - 23 residential setting, 6 independent-living arrangement

Materials

Supports Intensity Scale

- Three sections
 - Section 1: support needs scale: 6 areas
 - Section 2: protection and advocacy subscale
 - Section 3: exceptional medical and behavioural needs
- Measurement
 - Section 1 and 2: frequency of support, daily support, type of support
 - Section 3: 0 no support needed; 1 some support needed; 2 exceptional support needed
 - Support needs index

- Classification system
 - level 1: 84 or less
 - level 2: 85-94
 - level 3: 100-115
 - level 4: 116 or more
(the higher the score, the higher the level of support)

Design and procedure

| | Interviewer | Respondent | Client |
|----|----------------------|---------------|--------|
| T1 | Staff-coordinator | Staff | N = 29 |
| T2 | Independent assessor | Client/family | N = 29 |

Results

Table 1:
Staff-client
reliability
coefficients
(n=29)

| Factor | Client (<i>r</i>) |
|--------------------------------|------------------------|
| Home Living Staff | .74** |
| Community Living Staff | .58** |
| Life-long learning Staff | .44** |
| Employment Activities Staff | .31* |
| Health and safety Staff | .77** |
| Social activities Staff | .51** |
| SIS Index Staff | .80** |

* $p < .05$ (one-tailed)

** $p < .01$ (one-tailed)

| SIS | Mean (SD) T1 | Mean (SD) T2 | t-value (df=28) |
|------------------------------|-----------------|-----------------|-----------------|
| Home living (0-92) | 31.69 (11,93) | 31.69 (11,27) | .000 |
| Community living (0-91) | 31.38 (21,15) | 22.10 (13,21) | -2.89** |
| Life-long learning (0-104) | 37.93 (20,53) | 19.90 (12,01) | -5.21** |
| Employment Activities (0-87) | 34.48 (17,30) | 17.93 (15,00) | -4.69** |
| Health and Safety (0-94) | 34.38 (14,91) | 30.86 (17,50) | -1.69 |
| Social Activities (0-93) | 36.59 (19,95) | 15.45 (13,40) | -6.51** |
| SIS-index | 82.86 (11,94) | 74.03 (7,95) | -6.49** |

Table 2: Comparison of caregiver (T1) and client (T2) mean scores (n=29)

** $p < .01$ (two-tailed)

Results

Table 3: Crosstabulation SIS index client/caregiver (n=29)

| | SIS index caregiver | |
|----------------------|----------------------|-----------------|
| | Level 1 (84 or less) | Level 2 (85-99) |
| SIS index client | | |
| Level 1 (84 or less) | 13 | 13 |
| Level 2 (85-99) | 0 | 3 |

Study 2

Construct validity

Construct validity

- In reference to the SIS, the underlying construct is the extraordinary support that a person needs in order to participate in activities of daily life;
- In comparison, the adaptive behavior construct refers to the adaptive skills that a person has learned—which is a measure of achievement or performance.

a three-step procedure for demonstrating construct validity

- (a) Select several constructs accounting for test performance (in this case, SIS vs. Vineland)
- (b) Make a hypothesis for each selected construct; and
- (c) Examine each hypothesis empirically.

Two hypotheses

- (1) Since the construct of support needs is different from the construct of adaptive behavior (as defined above), there should be a negative correlation between SIS and Vineland AB scores;
- (2) Because the SIS subscales measure various aspects of support provision, they should correlate significantly with each other.

Participants

- 75 individuals with ID
- 54,7% male, 45,3% female
- Level of intellectual disability:
 - Mild: n=27 (36%)
 - Moderate: n=22 (29,3%)
 - Severe: n=14 (18,7%)
 - Profound: n=12 (16%)
- Age: 14-81 (M = 42,08; *SD* 15,98)

Materials

- SIS
- Dutch translation of the Vineland Adaptive Behavior Scale
 - 225 items, three domains: communication, daily living skills and socialization
 - Items are ranked cfr level of difficulty in developmental order
 - Good psychometric properties

Procedure

- Using Vineland-Z and SIS, all participants were assessed by independent, well trained interviewers

CORRELATIONS SIS/VINELAND

| | HL | CL | LLL | EMP | H&S | SOC | SNS |
|------|------|------|------|------|------|------|------|
| VABS | | | | | | | |
| DL | -.89 | -.77 | -.38 | -.38 | -.84 | -.65 | -.78 |
| Soc | -.71 | -.65 | -.37 | -.37 | -.70 | -.57 | -.68 |
| Com | -.78 | -.74 | -.40 | -.42 | -.76 | -.61 | -.75 |
| TS | -.84 | -.76 | -.41 | -.42 | -.81 | -.65 | -.77 |

INTERCORRELATIONS

| | HL | CL | LLL | EMP | H&S | SOC |
|-----|-----|-----|-----|-----|-----|-----|
| HL | | | | | | |
| CL | .84 | | | | | |
| LLL | .52 | .59 | | | | |
| EMP | .50 | .61 | .71 | | | |
| H&S | .88 | .77 | .55 | .48 | | |
| SOC | .74 | .80 | .72 | .65 | .72 | |
| TOT | .88 | .91 | .78 | .75 | .86 | .90 |

Discussion

- Study 1
 - Acceptable level of inter-respondent reliability, but systematic higher estimation of staff support scores.
 - Various explanations
 - Importance of considering source of information carefully
- Study 2
 - Negative correlation coefficients between SIS and Vineland scores; as one increases functional skills, level of support decreases
 - High intercorrelation coefficients – the SIS measures various aspects of the same construct

Conclusion

- Findings are consistent across countries
- Add support for:
 - (a) the use of the SIS for consumer-driven evaluations (study 1); and
 - (b) the construct validity of the SIS (study 2).

- In conclusion, SIS users are provided with a wealth of information that can be used for multiple purposes;
- The results of the two studies provide additional support for the etic (universal) properties of the SIS (since both hypotheses were confirmed), while recognizing that some terms and concepts had to be reworded to reflect local (i.e. culture-bound/emic) properties;
- Further research on cross-cultural and multiple uses of the SIS on issues as ISP development, resource allocation and outcome evaluation is recommended.