

A Validation of the Life Satisfaction Scale in a Population of ADS Participants

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INTRODUCTION

- Life satisfaction is a subjective indicator of well being that may be difficult for cognitively impaired adults to express.
- The GDS is used as an indicator of well being focused on depressive indicators and demonstrating sound psychometric properties.
- Measures like Lohmann's Life Satisfaction Scale (LSS) have been supported in non-frail elders; but, its use with individuals experiencing cognitive impairment has not been validated.
- Because adult day service (ADS) programs serve primarily frail older adults, instruments assessing well being should demonstrate applicability to individuals with variable functioning.

Objective: To establish psychometric indicators for the LSS in a population of frail ADS participants.

STUDY SAMPLE

87 paired GDS and LSS assessments for 38 ADS participants conducted at time of enrollment and six months later. Table 1 describes participants.

Table 1. Participant Demographics.

Demographics based on first administration (n = 38)	M (SD) / N(%)
Age in years	80.1 (10.47)
Sex	
Female	18 (47.4%)
Race	
White	33 (86.8%)
Non-white	5 (13.2%)
Primary Diagnosis	
Dementia (Vascular Dementia, Alzheimer's, Parkinson's)	17 (44.6%)
Diabetes	6 (15.8%)
Hypertension	5 (13.2%)
Other	10 (26.4%)

METHODOLOGY

ADS participants completed the GDS and LSS biannually.

- Geriatric Depression Scale (GDS):** A measure of depressive symptoms, scores range from 0 to 15, with higher scores (11+) indicating greater likelihood of depression. The GDS has been used in mild to moderately cognitively impaired adults in various care settings (Greenberg, 2007; Yesavage, Rose, & Lapp, 1981).
- Life Satisfaction Scale (LSS):** The LSS measures five dimensions of perceived life satisfaction, including pleasure, determination, goal achievement, mood, and self-concept. Scores on the LSS range from 0 to 32, with higher scores indicating greater perceived satisfaction (Lohmann, 1980).

Expert panelists reviewed the GDS and LSS as part of an integrated assessment system of ADS participant outcomes. Panelists offered feedback on the validity and application of each scale to ADS participants.

ANALYSIS

Reliability

- Cronbach's alpha was calculated to indicate internal consistency of the LSS and the GDS.

Validity

- Content validity, used to determine whether items are relevant and representative of the construct, was determined using panelist responses to the GDS and LSS.
- Convergent validity was measured with correlation coefficients indicating the similarity of the constructs measured on the LSS and GDS.

RESULTS

- The LSS demonstrated high internal consistency ($\alpha = .91$).
- The 5-item GDS demonstrated acceptable internal consistency ($\alpha = .74$) while the 15-item GDS demonstrated high internal consistency ($\alpha = .91$).
- Expert panelist evaluations of the LSS and GDS supported each scale's relevance and representativeness of the wellness dimension of quality of life (QOL), suggesting content validity.
- However, panelists expressed a concern for the relevance of the GDS and LSS in understanding the experiences of ADS participants, namely individuals with cognitive impairment.
- All individual LSS items except for two ("I haven't a cent in the world" and "I sometimes worry so much that I can't sleep") positively correlated with the sum LSS score ($p < 0.01$), indicating convergent validity.
- LSS sum scores negatively correlated with GDS sum scores ($r = -.81$, $p < 0.01$), as did 29 of the 32 LSS items ($r = -.28$ to $-.65$, $p < 0.01$), associating greater life satisfaction with lower depressive symptoms.

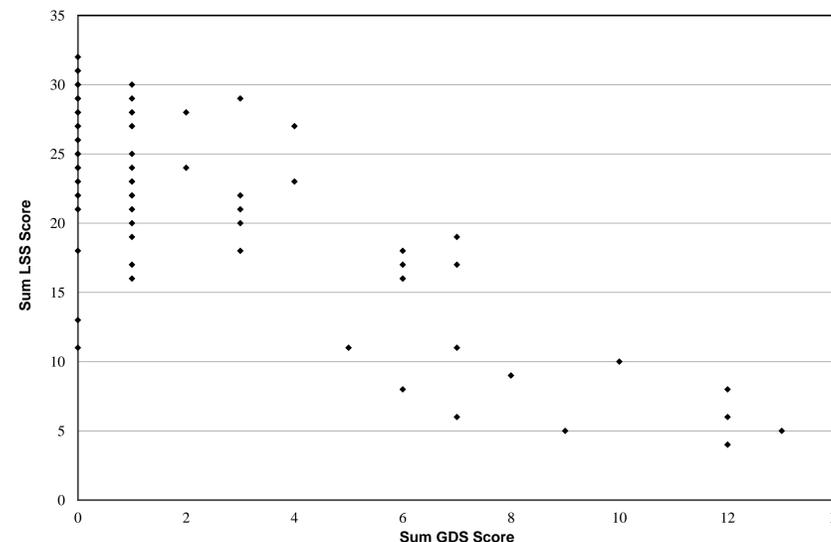


Figure 1. Correlation of Sum GDS and LSS Scores.

CONCLUSIONS

- The LSS demonstrates reasonable indicators of reliability and validity among a population of persons with cognitive impairment based on statistical analyses. Those who are more satisfied with life are less depressed. Thus, the LSS may be a useful tool for measuring QOL among ADS participants, including among persons with dementia.
- Panelists' feedback about the LSS, including concern about overlap between the GDS and LSS, the predominance of negatively worded items, and its lack of use in the field lead us to consider whether the LSS should be replaced by another scale (such as the QOL-AD by Logsdon) or used at all as part of a system that includes the GDS.

IMPLICATIONS

- Practitioners and researchers may find the LSS a useful measure of life satisfaction in a cognitively frail population.
- With an imbalance of negative to positive items, researchers may strike a more even mix of statements simply by reducing the number of items.
- Alternatives to the LSS include the QOL-AD, which has demonstrated good psychometrics. However, ADS practitioners expressed concern that Logsdon's 4-item Likert scale may be too difficult for ADS participants to complete. The LSS relies on disagree/agree options.
- Some panelists suggested using the GDS as a measure of well being because it is shorter and has a more even balance of positively and negatively worded items, but life satisfaction and quality of life are dimensions of well being exceeding mental health.
- The LSS addresses more global aspects of well-being, such as feelings of financial well-being.
- Evidence that life satisfaction can be measured in cognitively frail elders highlights the importance of giving a voice to adults who may be assumed unable to indicate their own well being. Inviting them to share their sense of wellness can help caregivers better meet elders' needs on multiple dimensions health.

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The second author is the Principal Investigator of the ADS Outcomes study and the associated Delphi Panel described in the current presentation.

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