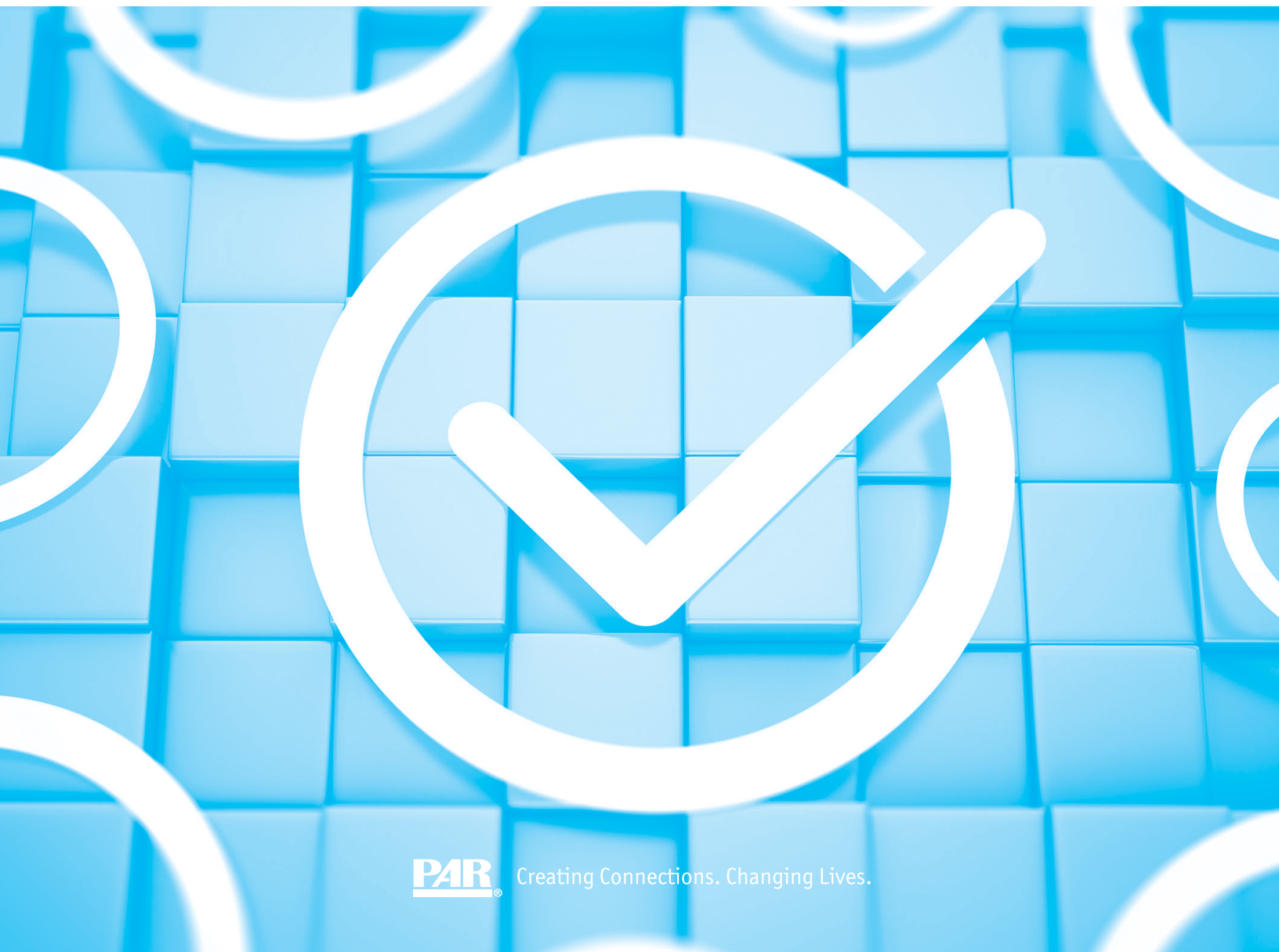




Administration and Scoring of the Geriatric Depression Scale–Short Form (GDS-SF)

PAR Staff



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OVERVIEW

The original Geriatric Depression Scale (GDS) is a 30-item instrument designed to screen for depression amongst older adults (Yesavage et al., 1983). However, due to length, abbreviated versions have been developed to address problems of fatigue and concentration difficulties. The Geriatric Depression Scale–Short Form (GDS-SF; Sheikh & Yesavage, 1986) is composed of 15 of the original 30 items that were strongly correlated with depressive symptoms. The GDS-SF has been found to be equally as effective as the original version in differentiating between those with and without depression among individuals age 55 years and older (Sheikh & Yesavage, 1986). Administration and scoring, available on [PARiConnect](#), take approximately 5 minutes.

ADMINISTRATION AND SCORING

The GDS-SF is administered using PARiConnect, PAR's online assessment platform. Examinees can complete the GDS-SF in-office or at a remote location via an email link, which launches the administration. Detailed information on the use of PARiConnect is available under All Help Topics in PARiConnect.

Each of the 15 items are displayed one at a time with a progress bar displayed below the response options. Items cannot be skipped during administration. Therefore, an advantage to administering the GDS-SF via PARiConnect is

the ability to capture a complete administration each and every time.

The GDS-SF is written at a fourth-grade reading level (Nelson et al., 2010). Examinees are asked to respond “Yes” or “No” to each item in reference to the past week (see [Appendix](#)). One point is given for depressive responses. All responses are summed to calculate the GDS-SF score. Scores range from 0–15 with higher scores indicating a greater likelihood that an examinee requires further assessment for depression.

GDS-SF Score Report

Severity Ranges

After generating a Score Report on PARiConnect, an examinee's GDS-SF score will be plotted along a number line with shading to represent changes in severity of depressive symptoms (see [Figure 1](#)). Scores ranging from 0–4 are classified as Within Normal Limits, 5–9 as Mild, and 10–15 as Moderate-to-Severe. Severity ranges are based on guidance by Sheikh and Yesavage (1986).

It is important to note the validity of the GDS-SF score should be confirmed by substantiation of a history of depressive symptoms by the patient or caregiver(s), behavioral observations consistent with depression, and results of corroboratory measures (Woodard & Axelrod, 1999).

Additionally, cognitive factors such as orientation, receptive language, and severity of memory impairment are important to consider when evaluating the veracity of self-report measures like the GDS-SF (Woodard & Axelrod, 1999).

Figure 1. GDS-SF Score Report Figure Example

Interpretation and Recommendations

In addition to an item response table, the GDS-SF Score Report includes a brief interpretation and recommendation section based on the examinee's score. For individuals who obtain a score of 5 or higher, the GDS-SF Score Report specifies a recommendation for further assessment and intervention by a qualified healthcare professional.

Reliability and Validity

Reliability

Sheikh and Yesavage (1986) reported an alpha coefficient of .82 for the GDS-SF indicating moderate internal consistency. Smarr and Keefer (2011) reviewed multiple studies with various populations and reported alpha coefficients ranging from .74–.86. High correlations ($r = .84-.85$) at 1–2 weeks retest suggest consistency of GDS-SF scores over time (Smarr & Keefer, 2011).

Validity

Sheikh and Yesavage (1986) report the correlation between the original 30-item GDS and the 15-item GDS-SF was fairly high at .84. Subsequent research has validated the GDS-SF in a variety of settings with an array of geriatric samples, such as older adults

living in nursing homes (Gerety et al., 1994), visiting their primary care physicians (D'ath et al., 1994), as well as geriatric inpatients with physical comorbidities (Shah et al., 1996). Rasch analysis resulted in dimensionality coefficients of .94 across multiple time points supporting a unidimensional construct of geriatric depression for items that compose the GDS-SF score (Chiang et al., 2009).

Criterion Validity and Cut-off Recommendations

Mitchell et al. (2010) suggest the GDS-SF is significantly more accurate than the original version and it has demonstrated good clinical utility as a screening test. Although the authors of the original study of the GDS-SF (Sheikh and Yesavage, 1986) did not provide a recommendation, a cut-off score of 5 or 6 is commonly used (Wancata et al., 2006). In a study of primary care outpatients age 60 years and older, Lyness et al. (1997) found the GDS-SF demonstrated sensitivity of 92% and a specificity of 81% using a cut-off score of 5 or higher. Almeida and Almeida (1999) found that using a cut-off score of 5 or higher produced sensitivity and specificity rates of 92.7% and 65.2%, respectively, and positive and negative predictive values of 82.6% and 83.3%, respectively, when using the *Diagnostic*

and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994) criteria to detect a major depressive episode. In a published review of 42 articles, Wancata et al. (2006) found pooled sensitivity of 80.5% and pooled specificity of 75% for the GDS-SF across varied settings. A meta-analysis conducted by Mitchel et al. (2010) found a sensitivity of 81.3% and a specificity of 78.4% with a classification accuracy of 77.6% across studies of the GDS-SF in primary care settings. Another meta-analysis by Pocklington

et al. (2016) found a cut-off score of 5 yielded pooled sensitivity of 89% and pooled specificity of 77% across 23 studies ($n = 11,468$ participants). See Pocklington et al. (2016) for additional pooled diagnostic data for the GDS-SF at different cut-off scores, at different age ranges, in different settings, and in Western and non-Western countries. Overall, the GDS-SF has demonstrated sufficient criterion validity by differentiating between depressed and nondepressed patients in a number of published studies.



REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).
- Almeida, O. P., & Almeida, S. A. (1999). Short versions of the Geriatric Depression Scale: A study of their validity for the diagnosis of a major depressive episode according to ICD-10 and DSM-IV. *International Journal of Geriatric Psychiatry*, 14(10), 858–865. <https://doi.org/cnb2vg>
- Chiang, K. S., Green, K. E., & Cox, E. O. (2009). Rasch analysis of the Geriatric Depression Scale–Short Form. *The Gerontologist*, 49(2), 262–275. <https://doi.org/d2vs37>
- D'ath, P., Katona, P., Mullan, E., Evans, S., & Katona, C. (1994). Screening, detection and management of depression in elderly primary care attenders. I: The acceptability and performance of the 15 item Geriatric Depression Scale (GDS15) and the development of short versions. *Family Practice*, 11(3), 260–266. <https://doi.org/b8dnd5>
- Gerety, M. B., Williams Jr., J. W., Mulrow, C. D., Cornell, J. E., Kadri, A. A., Rosenberg, J., & Long, M. (1994). Performance of case-finding tools for depression in the nursing home: Influence of clinical and functional characteristics and selection of optimal threshold scores. *Journal of the American Geriatrics Society*, 42(10), 1103–1109. <https://doi.org/gzdt>
- Lyness, J. M., Noel, T. K., Cox, C., King, D. A., Conwell, Y., & Caine, E. D. (1997). Screening for depression in elderly primary care patients. A comparison of the Center for Epidemiologic Studies–Depression Scale and the Geriatric Depression Scale. *Archives of Internal Medicine*, 157(4), 449–454. <https://doi.org/b28bdc>
- Mitchell, A. J., Bird, V., Rizzo, M., & Meader, N. (2010). Diagnostic validity and added value of the Geriatric Depression Scale for depression in primary care: A meta-analysis of GDS30 and GDS15. *Journal of Affective Disorders*, 125(1–3), 10–17. <https://doi.org/dkswxnd>
- Nelson, C. J., Cho, C., Berk, A. R., Holland, J., & Roth, A. J. (2010). Are gold standard depression measures appropriate for use in geriatric cancer patients? A systematic evaluation of self-report depression instruments used with geriatric, cancer, and geriatric cancer samples. *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology*, 28(2), 348–356. <https://doi.org/fk58tc>
- Pocklington, C., Gilbody, S., Manea, L., & McMillan, D. (2016). The diagnostic accuracy of brief versions of the Geriatric Depression Scale: A systematic review and meta-analysis. *International Journal of Geriatric Psychiatry*, 31(8), 837–857. <https://doi.org/f84bsw>
- Shah, A., Phongsathorn, V., Bielawska, C., & Katona, C. (1996). Screening for depression among geriatric inpatients with short versions of the Geriatric Depression Scale. *International Journal of Geriatric Psychiatry*, 11(10), 915–918. <https://doi.org/fb8hnx>
- Sheikh, J. I., & Yesavage, J. A. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist: The Journal of Aging and Mental Health*, 5(1-2), 165–173. <https://doi.org/fm5hgh>
- Smarr, K. L., & Keefer, A. L. (2011). Measures of depression and depressive symptoms: Beck Depression Inventory-II (BDI-II), Center for Epidemiologic Studies Depression Scale (CES-D), Geriatric Depression Scale (GDS), Hospital Anxiety and Depression Scale (HADS), and Patient Health Questionnaire-9 (PHQ-9). *Arthritis Care and Research*, 63(S11), 454–466. <https://doi.org/frx2rz>
- Wancata, J., Alexandrowicz, R., Marquart, B., Weiss, M., & Friedrich, F. (2006). The criterion validity of the Geriatric Depression Scale: A systematic

REFERENCES

- review. *Acta Psychiatrica Scandinavica*, 114(6), 398–410. <https://doi.org/fbkq74>
- Woodard, J. L., & Axelrod, B. N. (1999). Interpretative guidelines for neuropsychiatric measures with dichotomously scored items. *International Journal of Geriatric Psychiatry*, 14(5), 385–388. <https://doi.org/fsrft8>
- Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1982). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research*, 17(1), 37–49. <https://doi.org/cgjfp3>



APPENDIX

Geriatric Depression Scale–Short Form (GDS-SF) Items and Scoring

Item		Points
1	Are you basically satisfied with your life?	Yes = 0, No = 1
2	Have you dropped many of your activities and interests?	Yes = 1, No = 0
3	Do you feel that your life is empty?	Yes = 1, No = 0
4	Do you often get bored?	Yes = 1, No = 0
5	Are you in good spirits most of the time?	Yes = 0, No = 1
6	Are you afraid that something bad is going to happen to you?	Yes = 1, No = 0
7	Do you feel happy most of the time?	Yes = 0, No = 1
8	Do you often feel helpless?	Yes = 1, No = 0
9	Do you prefer to stay at home, rather than going out and doing new things?	Yes = 1, No = 0
10	Do you feel you have more problems with memory than most?	Yes = 1, No = 0
11	Do you think it is wonderful to be alive now?	Yes = 0, No = 1
12	Do you feel pretty worthless the way you are now?	Yes = 1, No = 0
13	Do you feel full of energy?	Yes = 0, No = 1
14	Do you feel that your situation is hopeless?	Yes = 1, No = 0
15	Do you think that most people are better off than you are?	Yes = 1, No = 0

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