

Geriatric Depression Scale-Short Form (GDS-SF) Performance in Native American Elderly Adults

Few neuropsychological performance and assessment data exist for elderly Native American individuals (but see Ferraro & Bercier, 1996; Van Winkle, Richter, Persson, Farmer, & Weiner, 1995). The present study was concerned primarily with performance on the Geriatric Depression Scale-Short Form (GDS-SF, Ferraro & Chelminski, 1996; Sheikh & Yesavage, 1986; Yesavage, Brink, Rose, & Lum, 1983).

METHODS

Subjects

As part of a larger dementia screening protocol examining dementia prevalence in older adults, a sample of 22 Native American elderly adults (M age = 66.3 years, SD = 10.2; M education level = 8.9 years, SD = 3.8) from a reservation in North Central North Dakota completed the short form of the GDS. Other demographic and psychometric information was also collected from all individuals, and included sex, self-rated health, types and numbers of medications currently being taken, and performance on the vocabulary sub-test of the WAIS-R (Wechsler Adult Intelligence Scale-Revised).

Procedure

One of the authors (B.B.), who resides on this particular reservation, was responsible for locating and testing all participants as well as collecting all data. He tested each person individually in the home in a testing session that took no more than one hour in duration. Participants were identified and approached in a consec-

utive manner. All who were approached agreed to participate. All were fluent in English and understood the GDS-SF directions. Informed consent was first obtained, then the various demographic and neuropsychological information was collected.

Results

Native American elderly adults averaged 3.81 ($SD = 2.84$) on the GDS-SF. This mean value is below the range of scores (6-15) indicative of "probable" depression using the GDS-SF scale. Six of the 22 individuals had a score between 6-15, or approximately 23% of the sample. If we cautiously extrapolate GDS-SF performance to GDS-LF (30-item) performance, the GDS-SF score now becomes 7.62. This pattern of results is somewhat higher than in previous studies that have obtained GDS-LF scores from non-Native American elderly adults. For instance, Yesavage et al. (1983) reported that the mean performance of 40 elderly adults on the GDS-LF was 5.75 ($SD = 4.34$). Olin et al. (1992) found somewhat lower scores in their sample of 25 elderly adults ($M = 2.24$, $SD = 2.49$) on the GDS-LF. Finally, Rule et al. (1989) found that GDS-LF scores were relatively stable in older adults aged 50 ($M = 5.14$, $SD = 4.81$), 60 ($M = 4.64$, $SD = 4.72$), and 70 ($M = 5.52$, $SD = 4.87$) years of age.

To examine the relationship of GDS-SF performance to other demographic and neuropsychological measures obtained from participants, correlation coefficients were calculated, and this data is presented in Table 1.

As indicated in the Table, the only two correlation coefficients that were significant with GDS-SF performance were for Age, $r(20) = +.57$ ($p < .01$) and Number of Medications Currently Being Taken, $r(20) = +.44$ ($p < .05$). Although none of the remaining correlation coefficients were significant, there were some interesting trends that merit discussion. For instance, as GDS-SF scores increased, scores on a number of neuropsychological tests (Wechsler Adult Intelligence Scale-Revised Vocabulary test, Boston Naming Test, Logical Memory Test, Digit Symbol test) tended to decrease and the correlation coefficients were all in the negative range ($r_s = -.34$ to $-.15$). Although these particular correlations did not reach conventional levels of statistical significance in the

TABLE 1. Correlation Coefficient Values as a Function of Demographic Variables

	1	2	3	4	5	6	7	8	9	10	11
Age(1)	—	—	—	—	—	—	—	—	—	—	—
Sex(2)	-.26	—	—	—	—	—	—	—	—	—	—
Ed.(3)	.03	.42	—	—	—	—	—	—	—	—	—
Hlth(4)	.08	-.13	.12	—	—	—	—	—	—	—	—
Meds(5)	.24	-.40	-.08	.39	—	—	—	—	—	—	—
GDSSF(6)	.57**	-.29	-.05	.41	.44*	—	—	—	—	—	—
VOC(7)	-.01	.59**	.78**	.09	-.09	-.15	—	—	—	—	—
BNT(8)	-.11	.46*	.72**	.18	-.02	-.32	.70**	—	—	—	—
LMI(9)	-.30	.69**	.23	-.17	-.38	-.21	.58**	.24	—	—	—
LMD(10)	-.31	.58**	.25	-.37	-.30	-.34	.59**	.16	.77**	—	—
DIG(11)	-.37	.50*	.30	.12	-.18	-.22	.36	.35	.41	.04	—

NOTE: *p* < .05 (*italics*); *p* < .01 (**boldface**); Ed. indicates Education; Hlth indicates Health; Meds. indicates Number of Medications; GDSSF indicates Geriatric Depression Scale-Short Form; VOC indicates Vocabulary; BNT indicates Boston Naming Test; LMI indicates Logical Memory Immediate; LMD indicates Logical Memory Delayed; DIG indicates Digit Symbol.

present sample, they are suggestive that "probable" depression contributes in a negative fashion to cognitive performance in this sample of Native American elderly adults.

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REFERENCES

- Ferraro, F. R., & Bercier, B. (1996). Boston Naming Test performance in a sample of Native American elderly adults. *Clinical Gerontologist, 17*, 58-60.
- Ferraro, F. R., & Chelminski, I. (1996). Preliminary normative data on the Geriatric Depression Scale-Short Form (GDS-SF) in a young adult sample. *Journal of Clinical Psychology, 52*, 443-447.
- Olin, J. T., Schneider, L. S., Eaton, E. M., Zemansky, M. F., & Pollock, V. E.

- (1992). The Geriatric Depression Scale and the Beck Depression Inventory as screening instruments in an older adult outpatient population. *Psychological Assessment*, 4, 190-192.
- Rule, B. G., Harvey, H. Z., & Dobbs, A. R. (1989). Reliability of the Geriatric Depression Scale for younger adults. *Clinical Gerontologist*, 9, 37-43.
- Sheikh, V. I., & Yesavage, J. A. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. In T. L. Brink (Ed.), *Clinical gerontology: A guide to assessment and intervention*. NY: The Haworth Press, Inc.
- Van Winkle, N. W., Richter, R. W., Persson, D., Farmer, I., & Weiner, M. (1995). *Results of a pilot study of cognitive impairment among Cherokee elders*. Presented at the Gerontological Society of America meeting, Los Angeles, CA.
- Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research*, 17, 37-49.