EDITORIAL

Assessment of Depression: Which are the Prominent Mental Health Instruments in Research Studies?

Historically, the assessment of depression has garnered a central role in evaluation of mental health (Brantley et al., 2004; Cusin, et al., 2010; IsHak et al., 2002; Piotrowski, 1996). Indeed, a perusal of 2 popular texts on psychological assessment (i.e., Hunsley & Mash, 2008; Maruish, 2000) finds several chapters on the issue of depression in children, adolescents, adults, and the elderly. Noteworthy, several modern scales purporting to assess depression levels have gained the attention of clinicians and assessment faculty. For example, instruments like the Patient Health Questionnaire (PHQ-9), the Patient-Reported Outcomes Measurement Information System (PROMIS; Young et al., 2019), and the Hospital Anxiety and Depression Scale (HADS: see Turk et al., 2015) may offer alternative avenues for the efficient, brief assessment of mood states.

A careful review of rankings of the most popular tests reported in ,test usage" studies, over the past 50 years, indicates that symptom-focused scales in the area of depression have been quite prominent (see Archer et al., 1991), including usage at psychology internship sites (Piotrowski & Belter, 1999). Piotrowski and Lubin (1990) found the following instruments highly ranked by clinical-health psychologists in the assessment of depression: the MMPI, Beck Depression Inventory, Profile of Mood States, the Zung Self-Rating Scale for Depression, the CES-D; the

Children's Depression Inventory and the Geriatric Depression Scale were used moderately. More recently, a national survey of professional psychologists found that symptom-specific measures, including the Beck Depression Inventory (BDI), were the most frequently used tests (Wright et al., 2017).

It would be of interest to examine the level of clinical acceptance of various measures of depression over the past few decades. One approach would be to determine the magnitude of usage of depression assessment instruments most noted by researchers in the mental health field. To that end, the current exercise involved an online search in the database PsycINFO. The main keyword was ,depression" which needed to appear as a term in the Title of published articles. In order to appreciate changes over time, this analysis was performed across 3 timeframes (1920-1989; 1990-2004; 2005-2020). The issue was not in the total number of articles, but in the ranking of the top tests which were the most emphasized across research studies.

Table 1 presents the aggregated results of these analyses, with a listing of the top assessment instruments cited across thousands of studies. Interestingly, the BDI (I & II) and the Hamilton Rating Scale for Depression were the top 2 tests across all time frames.

Table 1. Top Assessment Instruments in Research on Depression indexed in PsycINFO

1920-1989 (Total n=6,688 articles)	1990-2004 (Total n=16,996 articles)	2005-2020 (Total n=41,468 articles)
Beck Depression Inventory	Hamilton Rating Scale for Depression	Beck Depression Inventory (I & II)
Hamilton Rating Scale for Depression	Beck Depression Inventory (I & II)	Hamilton Rating Scale for Depression
SADS	Geriatric Depression Scale	CES-D
Social Adjustment Scale	Montgomery-Asberg Depression Rating scale	DSM Structured Interview
Children's Depression Inventory	MMSE	MMSE
Dyadic Adjustment Scale	Hospital Anxiety & Depression Scale	Montgomery-Asberg Depression Rating Scale

Raskin Depression Scale	DSM Structured Interview	Patient Health Questionnaire (PHQ-9)
Symptom Checklist-90 (SCL-90)	General Health Questionnaire	Hospital Anxiety & Depression Scale
Zung Self-Rating Depression Scale	Zung Self-Rating Depression Scale	Mini-International Neuropsychiatric Interview
Bellevue Index of Depression	Beck Anxiety Inventory	

A recent analysis found that the BDI was used at least moderately in 21 (60%) of the 35 survey-based studies of practice settings since 1989 (Piotrowski, 2018). Apparently, this high level of clinical acceptability has impacted professional training, in that 7 of the 10 surveys of academic settings, in the 2018 analysis, showed from moderate to high levels of training emphasis with the BDI. Thus, the BDI has been strongly embraced by mental health professionals.

These findings, based on bibliometric data, can indeed inform assessment practices. The BDI is popular in mental health assessment, perhaps due to brevity, ease of scoring, specificity, and a substantial body of research literature. Moreover, the BDI furnishes the busy clinician with interpretable quantitative assessment data. This supports comprehensive mental health evaluation, in that brief, symptom-focused measures tend to facilitate treatment planning, monitoring of clinical progress, and evaluation of outcome assessment (Maruish, 2000, pp. 398-405).

In fact, recent survey data indicate that professional acceptance of the Beck inventories is on the increase (see Piotrowski, 2018; Wright et al., 2017). Evidently, this popularity of the BDI has been reflected in survey studies on test usage, and in the clinical curriculum of both professional psychology training programs and internship settings in recent years (see Table 2).

What factors may account for the popularity of these 2 scales? Indeed, the BDI and the Hamilton Rating Scale for Depression have had few self-report competitors in the assessment of depression when first introduced in the mental health literature. As a result, even 30 years later, these instruments have outranked all other brief instruments used in assessing depression (see Piotrowski & Lubin, 1990). Moreover, following robust revisions, the BDI-II emerged as a muchimproved instrument both conceptually and clinically (confirmed by the positive reviews of the BDI-II in the Mental Measurements Yearbook).

Table 2. Emphasis or Use of the BDI in Training/Practice Settings across Studies (2010-2017)

Study	Country	Sample	Findings
Smith et al.	USA	404 members of the International	The Beck scales were used by 86%
(2010)		Neuropsychological Society or	of the respondents to some degree;
		National Academy of	30% use these inventories
		Neuropsychology surveyed on	"sometimes".
		personality assessment practices	
Donoso et al.	USA	150 professionals who conduct	Amongst a variety of types of tests,
(2010)		vocational rehabilitation evaluations	the BDI ranked 5 th , used by 58% of
			respondents.
Ackermann	USA	213 forensic psychologists surveyed	The BDI was ranked 7 ^{th,} and used by
& Pritzl		on tests used with parents in child	one-third of the sample in
(2011)		custody evaluations in 2008	assessment of parents in custody
			evaluations.
Evers et al.	17 European	Testing practices reported by 12,606	Overall, the BDI was the 6 th most
(2012)	countries	professional psychologists in Europe	popular test, used by 7% of
			respondents; in Turkey (20%), Spain
			(14%), Germany (12%), Austria
			(12%), U.K. (9%), Norway (8%),
			Sweden (7%), Netherlands (5%).

*Neukrug et al. (2013)	USA	Based on survey data from 210 counselor educators across the U.S., this study examined graduate-level coverage of assessment instruments by instructors	Amongst a copious list of tests, the BDI ranked #1, covered by 99% of instructors.
Peterson et al. (2014)	USA	926 counselors (clinical mental health, school, occupational) rated tests of all types regarding usage	Overall, amongst an extensive list of testing instruments, the BDI ranked #1 (most popular in mental health clinics).
Neal & Grisso (2014)	International sample: USA (45%), Canada (7%), Europe (3%), Australia- New Zealand (4%)	434 forensic examiners of professional organizations	Across a variety of forensic/legal domains, the BDI was used occasionally only for "Disability" (17%) and "Civil tort" (8%) evaluations.
*Ready & Veague (2014)	USA	Compared training in psychological assessment across 3 training models (Clinical-Science, Scientist-Practitioner, Practitioner-Scholar) in APA-Accredited programs	The BDI-II was the 4 th most popular test, covered between 53% and 88% of programs.
*Bates (2016)	USA	Dissertation study, reporting views of 182 internship directors toward doctoral-level assessment training &usage of specific tests by interns	BDI: 87% of these settings rely on the BDI in general; 65% of interns use the BDI frequently; 56% of directors prefer training with the BDI prior to internship.
Rabin et al. (2016)	USA & Canada	Testing practices of 512 neuropsychologists; members of INS and NAN	Among "Top" tests for "personality assessment", the BDI was ranked 2 nd
*Ready et al. (2016)	USA & Canada	Views of Directors of internship settings on pre-internship preparation in assessment; Data based on 236 APPIC sites	Among a myriad of mental health tests, the BDI-II ranked 3 rd , used by 61% of the internship sites.
Wright et al. (2017)	USA	279 members of APA in practice, with an interest in Assessment; A cautionary note- Data based on low response rate (17%)	Amongst all types of psychological assessment instruments, symptom-specific tests (e.g. BDI) were ranked #1 among the top 13 tests.
*Mihura et al. (2017)	USA	Of 244 APA-accredited doctoral clinical psychology programs, 83 usable surveys were analyzed regarding assessment training	The survey, in a general fashion, inquired about "coverage" in graduate-level assessment courses and practicum; The BDI was not among top tests in the domain of Personality or Psychopathology.
Egeland et al. (2017)	Norway, Denmark, Sweden, Finland	Surveyed 702 neuropsychologists in Scandinavia on use of self-report tests and questionnaires in practice	The BDI-II ranked #1, used by 63% of respondents.

Note. Studies marked with asterisk (*) focused on graduate/internship training.

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