

THE CONCURRENT VALIDITY OF THE BURNS DEPRESSION CHECKLIST REVISED

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INTRODUCTION: Depression is one of the major mental health problems that the United States must face. Concerning the prevalence of depression, during any given month approximately 4 percent of men and 6 percent of women in the United States are clinically depressed (Alloy, Jacobson, & Acocella, 1999). Depression is a disorder that if left untreated results in significant impairment in social, occupational, and academic functioning of the depressed individual. Indeed, the poor functioning of the individual with depression is comparable and sometimes worse than the other major chronic medical conditions such as hypertension, diabetes, coronary disease and arthritis (Mendlewicz, 1989). Given the significant impairment that depression causes, it is a necessity to have valid instruments that will aid in the detection and treatment of depression. Recently there have been a number of checklists developed to assess the symptoms of depression. The Beck Depression Inventory-II and the Burns Depression Checklist are two of these instruments. Both of these instruments are well-established measures of depression. The purpose of this research project is to evaluate the concurrent validity of the Burns Depression Checklist-Revised (Burns-D-R), a brief, self-report inventory for assessing the severity of depressive symptoms. This will be accomplished by correlating the Burns D-R with scores on the Beck Depression Inventory-II (BDI-II) and the Burns Depression Checklist (Burns-D).

METHOD: Participants consisted of 100 Eastern Kentucky University undergraduate students enrolled in undergraduate psychology courses. The examiner administered printed versions of the instruments (the BDI-II, the Burns-D, and the Burns D-R) to participants in small groups consisting of 10 to 20 people. Participants were administered the instruments in a varied order of administration in order to control for order effects. The examiner first explained the confidentiality of the participants' responses and the procedures of this study. After obtaining informed consent to the requirements and rights, the participants completed a brief demographic form. Upon completing the study, the participants were debriefed by the examiner and given a debriefing form, and received an explanation of the purpose of the investigation.

RESULTS: The purpose of the present study was to determine the concurrent validity of the Burns Depression Checklist – Revised (Burns D-R), a recently developed self-report measure of depression. This was accomplished by correlating scores on the Burns Depression Checklist – Revised with scores on two well-established measures of depression, the Beck Depression Inventory-II (BDI-II) and the Burns Depression Checklist (Burns-D). Mean scores and standard deviations of the three instruments are reported in the table below.

Mean Scores and Standard Deviations of the Burns D-R, BDI-II, and Burns-D; N=100.

Instrument	Mean Score	Standard Deviation	Range
Burns D-R	15.99 “normal but unhappy”	18.64	0-98
BDI-II	10.60 “minimal depression”	10.34	0-54
Burns-D	9.22 “normal but unhappy”	8.23	0-43

Correlational analyses were conducted on the scores obtained from the participants on each of the three inventories. These correlations are shown in the table below. It was found that the Burns D-R correlated significantly ($p < .01$) with the BDI-II ($r = .921, p < .01$) and with the Burns-D ($r = .916, p < .01$). Also, the BDI-II and the Burns-D were correlated significantly ($r = .908, p < .01$).

Intercorrelations between the Burns D-R, BDI-II, and the Burns-D.

Instrument	Burns D-R	BDI-II	Burns-D
Burns D-R	1.000	.921*	.916*
BDI-II		1.00	.908*
Burns-D			1.000

*significant at the .01 level

The results of the study support the initial hypotheses that the Burns D-R would be significantly correlated with the BDI-II and the Burns-D. This strong correlation is thought to be caused by similarities in the structure and theoretical properties of the instruments.

In addition to evaluating the concurrent validity of the Burns D-R, this study also examined the reliability of this measure using Cronbach's coefficient alpha. The Burns D-R was found to demonstrate a high level of internal consistency ($\alpha = .966$), which suggests that each of the items on the inventory are measuring a common dimension.

Discussion: The examination of the obtained data reveals that the Burns D-R was significantly and positively correlated with the two depression inventories which were used as criterion measures, namely the BDI-II and the Burns-D. This means the scores on the Burns D-R, BDI-II, and the Burns-D covary in a systematic fashion. That is, elevated scores on the Burns D-R coincide with the elevated scores on the BDI-II and the Burns-D, medium scores on the Burns D-R correspond to medium scores on the BDI-II and the Burns-D, and low scores on the Burns D-R coincide with the low scores on the BDI-II and the Burns-D. The high correlations observed between the Burns D-R, BDI-II, and Burns-D gives convincing support that one of these instruments could be used in place of the other.

Regarding the correlations between the BDI-II and the Burns-D, the correlation coefficients found in this study support previous empirical studies on these instruments, which have shown that the correlation between the BDI-II and the Burns-D is both high and significant. In previous studies correlating the BDI-II and the Burns-D, correlations ranged from .88 to .92. The correlations between the BDI-II and the Burns-D in the present study resulted in $r = .908$.

Additionally, the results of this study indicate that the Burns D-R has high internal consistency as measured by the coefficient alpha. The specific coefficient alpha was .97. Little psychometric data is available for this instrument, and as such, the present study provided valuable psychometric information on the Burns D-R.

Conclusion: Depression occurs with high frequency in the United States and throughout the world. The high prevalence rates of depression clearly point towards the necessity for valid and reliable assessment instruments for researchers and clinicians. These types of instruments are critical to the diagnosis, assessment, and the evaluation of treatment efficacy.

As stated earlier, the primary focus of this study was to evaluate the concurrent validity of the Burns Depression Checklist – Revised (Burns D-R), a relatively new brief self-report measure of depression. Concurrent validity was determined by examining the relationship between the scores on the Burns D-R and two well-established measures of depression, the Beck Depression Inventory-II (BDI-II) and the Burns Depression Checklist (Burns-D). The correlations between these measures resulted in statistically significant correlation coefficients, suggesting that the Burns D-R is a valid measure of depression, and further, it can be used interchangeably with the BDI-II and the Burns-D.

References:

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