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Poster: Validity of Anxiety and Depression Scales Created from the NCHA-II


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Introduction

The ACHA National College Health Assessment (NCHA II) questionnaire does not have pre-validated measures to assess levels of anxiety and depression of college students. Given this, anxiety and depression scales (i.e., AS and DS) were created from the NCHA-II and compared with pre-validated measures.

Participants

A random sample of 180 participants was selected from the undergraduate students who completed the 2018 administration of the NCHA II.

Methods

Recency of symptoms was considered a reflection of severity of symptoms. As such, items 30A, B, C, E, F, G, J & K were scored:

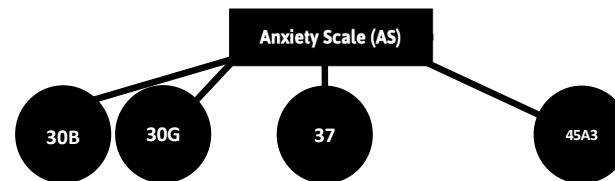
- “0” if symptoms were never present or not present within the last 12 months
- “1” if symptoms were present in the last 12 months
- “2” if symptoms were present in the last 30 days
- “3” if symptoms were present in the last two weeks.

Item 37 (level of stress) was scored from 1 (low) to 5 (high) on AS.

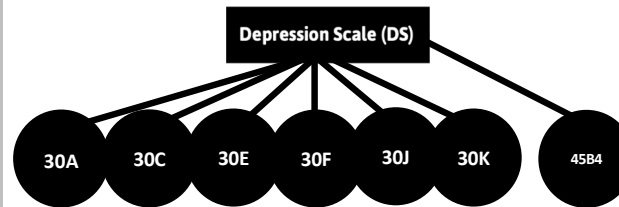
Items 45A3 & B4 were scored with the presumption that overall level of disruption indicated a greater level of anxious or depressive distress.

- “0” indicating no disruption
- “4” indicating high disruption (e.g., the respondent had received an incomplete grade of dropped a class).

Thus, the AS had a range of 0–13, with a score of “0” meaning little problem with anxiety and a score of “13” indicating the worst anxiety symptoms reported.



The DS had a range of 0–22 with a score of “0” meaning little problem with depression and a score of “22” indicating the worst depression symptoms reported.



Results

Alpha coefficients were computed on each measure to ensure internal consistency and Pearson correlations were computed to compare the scales to pre-existing measures. More specifically, the AS was compared with the General Anxiety Disorder 7-Item Scale (GAD-7) and the DS was compared to the Patient Health Questionnaire (PHQ-9), as these are similarly brief measures and have demonstrated validity (Löwe et al., 2008; Kroenke et al., 2001).

Anxiety Scale (AS)

$r = 0.68$

GAD-7

Depression Scale (DS)

$r = 0.77$

PHQ-9

Results demonstrated the AS and DS have strong positive correlations to the GAD-7 ($r = 0.68$) and PHQ-9 ($r = 0.77$), thus indicating these scales likely measured what they were intended to measure.

Discussion

Given that the NCHA-II does not have pre-validated measures to assess levels of anxiety and depression of college students, the AS and DS may offer a useful tool for doing so.

References

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Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care*, *46*(3), 266–274. <https://doi-org.georgefox.idm.oclc.org/10.1097/MLR.0b013e318160d093>

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