

**Comments on Rehman et al (J Pak Med Assoc. 2018; 68: 195)****Self-reported academic performance in relation to health behaviours among Bahria University students**

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Rehman, et al, conducted a cross-sectional study among students enrolled in Bahria University, Karachi, from January 2012 till December 2013.<sup>1</sup> The authors aimed to investigate an interaction between a student's academic performance (AP) with respect to socio-demographic characteristics, health behaviour and reported mental health. A key feature of this study was the evaluation of depression among study respondents using the Centre for Epidemiological Studies Depression (CES-D) scale. The authors identified key depressive symptoms associated with a lower AP. We applaud the authors for investigating this critical topic, however we feel certain modifications in study design and analysis would improve the validity of their results.

CES-D symptom scores were expressed as discrete categories, and subsequent analysis was conducted using Chi-squared test.<sup>1</sup> The CES-D scale, developed by Radloff, et al, is designed to be computed as a numerical score, to estimate the degree of depressive symptomatology in a respondent.<sup>2</sup> An incorrect application of this scale therefore predisposes to

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questionable interpretation of results, when expressed in a Chi-squared table.<sup>1</sup> It would have been more appropriate for the authors to compute a numerical score and apply a pre-validated cut-off score for depressive and non-depressive patients, as has been done in similar studies.<sup>3,4</sup> Subsequent analysis may have been performed using parametric or non-parametric tests of independence, as appropriate.

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**References**

1. Rehman R, Zafar A, Mohib A, Hussain M, Ali R. Self-reported academic performance in relation to health behaviours among Bahria University students. JPak Med Assoc 2018; 68: 195-9.
2. Radloff LS. The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. Applied Psychological Measurement. 1977; 1: 385-401.
3. Baron EC, Davies T, Lund C. Validation of the 10-item Centre for Epidemiological Studies Depression Scale (CES-D-10) in Zulu, Xhosa and Afrikaans populations in South Africa. BMC Psychiatry. 2017; 17: 6.
4. Othieno CJ, Okoth RO, Peltzer K, Pengpid S, Malla LO. Depression among university students in Kenya: prevalence and sociodemographic correlates. Journal of affective disorders. 2014; 165: 120-5.