

Sum MY, Chew QH, Sim K. Perceptions of the learning environment on the relationship between stress and burnout for residents in an ACGME-I accredited national psychiatry residency program. *J Grad Med Educ.* 2019;11(4 suppl):85–90.

Supplemental Material

Details of Rating Scales

Participants were administered four self-rated questionnaires and the details are as follows:-

(1) The Postgraduate Hospital Educational Environment Measure (PHEEM)²¹ was used to assess residents' perceptions of their learning environment. The scale consists of 40 items with three subscales. The three subscales include, Perceptions of role autonomy (14 items, maximum score of 56), Perceptions of teaching (15 items, maximum score of 60), and Perceptions of social support (11 items, maximum score of 44). The scale also consists of a total score on overall perception of learning environment that ranges from 0 to 160, with higher scores indicating better quality learning environment. The PHEEM is a highly reliable, valid and practical instrument used in many studies conducted in different residency learning sites around the world.^{7,22-24}

(2) Stress level in residents was assessed using the Perceived Stress Scale (PSS).²⁵ The PSS measures stress level of residents in the past month and it contains 10 items on a five-point Likert scale. The score ranges from 10 to 50, with higher scores indicating higher level of stress.

(3) The Oldenburg Burnout Inventory (OLBI)²⁶ was used to assess the level of burnout of the residents, and the OLBI measures two domains: exhaustion and disengagement. The OLBI has 16 items on a four-point Likert scale, with eight items measuring each domain. OLBI exhaustion and OLBI disengagement refer to the average score of the items within each domain; with higher scores indicating higher levels of burnout.

(4) The Brief COPE Inventory²⁷ was used to assess coping mechanisms adopted by the residents to manage their stress. This inventory includes 28 items on a four-point Likert scale, and it can be grouped into 14 coping strategies (with two items per strategy) that are adopted in response to a particular stressor. The 14 strategies are: self-distraction, active coping, denial, substance use, emotional support seeking, instrumental support seeking, behavioural disengagement, venting, positive reframing, planning, humour, acceptance, religion, and self-blame.