Positive and Negative Affect, Anxiety, and Academic Achievement among Medical Students in Saudi Arabia

been shown to have powerful inpuence on students and their overall academic achievement and performance in

of the PANAS and TMAS measures with Grade Point Average (GPA) was performed. The present study ýndings revealed that the association of positive affect (p = 0.016) of PANAS is signiýcantly and strongly related to GPA

component of PANAS enhances the grade p

American Psychological Association (APA) defned anxiety as mixed feelings of tension, worried thoughts, and physical changes associated with autonomic arousal, skeletal muscle tension, and situational aspects, whereas stress is more associated with irritability, impatience, and diffculty in relaxing (APA, 2016). More than 300 studies on stress and immunity in humans confrm that psychological distress can have a negative impact on the immune system and is capable of modifying various features of the immune response. For example, research has shown an association between depression and other ailments such as osteoporosis and cancer (APA, 2016). Academic achievement is generally defned as accomplishments at school, college, or university; in class; in a laboratory, library, or project, evaluated through conducting examinations or continuous assessment, which is measured using grade point average (GPA; Ward, Stoker, & Murray-Ward, 1996).

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Medical education generally encompasses tiring stud training for fve to six years. During this period, medical st should acquire adequate professional knowledge, skills, and a to deal with challenges independently. During their educ students are exposed to a lot of pressures that may disturb psychological and emotional behaviour and subsequently academic achievements. Several studies have demonstrate medical students with the strenuous study and trainings u suffer from depression, anxiety, and stress (Dyrbye et al., Henning, Ey, & Shaw, 1998; Roberts et al., 2001). This wa confrmed in two separate studies showing that healthy st after commencing their medical education develop depr and stress levels that may have negative effects on their cog functioning and learning abilities in medical school (Abdul AlKanhal, Mahmoud, Ponnamperuma, & Alfaris, 2011; Y Abdul Rahim, Baba, Ismail, Mat Pa, & Esa, 2013).

Positive affect, negative affect, anxiety, and the relatio amongst these experiences are a matter of concern. A symptoms are associated with impairment of memor cognitive functions, which might interfere with general being, social life, academic performance, learning ability development of social relationships (Afolayan, Donald, On Babafemi, & Juan, 2013; Mazzone et al., 2007; McDonald, Neil & Donald, 2010). Generally, a student feels anxious be test or examination, but it becomes a matter of concern wh condition is severe (Mc Donald, 2010), which may occur as a

Correspondence regarding this article should be directed to: Ahmadalkhalaf@hotmail.co.uk

of the student's past experiences with the tests or examination, faculty pressure, course load, inappropriate time management, family issues and beliefs, etc. (Alzahem, Van Der Molen, Alaujan, Schmidt, & Zamakhshary, 2011; Dyrbye, Thomas, & Shanafelt, 2006; Roh, Jeon, Kim, Han, & Hahm, 2010; Sansgiry & Kavita, 2006). The above mentioned indicators of anxiety are seen more frequently in medical students who are in the early years of their education, as compared to more advanced students (Al-faris et al., 2012; Aboalshamat, Hou, & Strodl, 2015). Positive affect was shown to promote positive well-being and satisfaction with life, which may further enhance quality of life as well as medical

the percentage of participants from Year 2 to Year 6, mean year of study in the program, overall mean anxiety levels (PANAS, TMAS), and GPA are presented in Table 1.

A Pearson correlation coeff cient was used to measure the degree of association between positive affect and negative affect with GPA, year of study and with nature of manifestation of anxiety disorders. There was a signi f cant negative correlation between positive affect and the TMAS in the medical students (p0.01), which indicates that as positivity decreases the anxiety increases. Whereas negative affect has signi f cant positive correlation with TMAS suggesting as the negative component of PANAS increases anxiety increases.

A correlation among of positive affect and negative affect with year level and with GPA showed a signi f cant association of PANAS-PA with GPA (p = 0.016) and negative correlation between the PA and year level that only neared signi f cance (p = 0.094). However, there is no signi f cant relationship between PANAS-NA and year level and or PANAS-NA and GPA (Table 2).

Furthermore, analysis of the relationship between GPA and TMAS indicated a negative correlation that did not reach signi f cance.

DISCUSSION

A prevalence of anxiety among medical students is a rising concern as it may impair the students' behavioural functions, diminishing learning and causing poor academic performance, which ultimately may impact patient care when these medical students move on in their careers. The study reveals that there are signi f cant positive and negative effects on the level and nature of manifestation of anxiety (p0.01). Positive affect is associated with reduced anxiety disorders, and similarly negative affect is associated with an increase anxiety disorders in medical students. Overall, the analysis showed positive and negative affect (PANAS) both have signi f cant associations with anxiety (TMAS), but only the positive affect of PANAS is signi f cantly associated with GPA.

The negative effects of medical education on students' psychological well-being have been discussed in several studies. A study from the United Kingdom by Salmons (1983) reported that one-third of psychologically-ill medical students did not graduate from the college, demonstrating the signi f cant l

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