

ACADEMIC MISCONDUCT IN MEDICAL STUDENTS: DO PSYCHOLOGICAL WELL-BEING TRAITS PLAY A ROLE?

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KEY WORDS

academic integrity, academic misconduct, medical students, psychological well-being

BACKGROUND

Medical education strives to develop high technical and ethical standards in future physicians (Birden et al., 2014; Frenk et al., 2010). However, worldwide evidence (Abdulghani et al., 2018; Desalegn and Berhan, 2014; Hrabak et al., 2004; Monteiro et al., 2018; Rennie and Crosby, 2001) suggests that medical students still report compromising ethics and academic integrity by engaging in academic misconduct. Academic integrity is a broad concept which entails compliance with ethical norms, principles and values, such as honesty, fairness, trust, responsibility and respect for others, within the teaching-learning process and/or research (ICAI, 2014; Tauginienė et al., 2018). Medical students who breach academic integrity may not only fail to develop core professional technical, ethical and humanistic qualities (Abdulghani et al., 2018), but are also likely to perpetuate such dishonest behaviour during professional practice, undermining public health and safety

(Papadakis et al., 2005). Academic misconduct is a pervasive and multifaceted phenomenon, nurtured by cheating-permissive cultural and academic contexts, but also linked to student individual characteristics (Desalegn and Berhan, 2014; McCabe et al., 2001; Whitley, 1998), including personality traits (Giluk and Postlethwaite, 2015; Lee et al., 2020; Zhang et al., 2018). Although, while some psychological facets have been extensively studied, the role of psychological well-being traits is still underexplored. Attributes such as autonomy to make independent decisions, environmental mastery to manage life challenges, sense of purpose in life and personal growth, self-acceptance and the ability to establish positive relationships, portray desirable qualities and useful resources (Bowman, 2010; Ryff, 2014) which might offer a protective shield against student involvement in academic misconduct.

OBJECTIVES

This study aimed to explore associations between academic misconduct and psychological well-being traits in medical students.

METHODS

A cross-sectional study was conducted on 591 Portuguese students attending the first, third and fifth years at the Faculty of Medicine of University of Porto (FMUP), during the same academic year. Data was collected using paper questionnaires with multiple-choice questions on sociodemographic characteristics (e.g., sex, academic year), psychological attributes, using the Portuguese version (Novo et al.,

1997) of Ryff's Psychological Well-Being Scales (Ryff and Keyes, 1995), and cheating-related perceptions (peer fraud, severity of penalty) and behaviour (cheating during exams, prior exams, in academic work, attendance sheets, and plagiarism) by applying a newly developed Academic Integrity Questionnaire ($\alpha = 0.60\text{--}0.88$).

RESULTS AND DISCUSSION

Of the 591 students, 44.5% were attending first year, 37.6% third year and 17.9% fifth year of medical school, 66.7% were female, with a mean age of 20.4 (SD = 3.2). Prevalence of cheating was around 95%, with plagiarism (85%) taking the lead over the other forms of cheating (~60%). These findings are concerning and probably reflect the permissive culture of cheating in the Portuguese context (Almeida et al., 2015; Monteiro et al., 2018). Signature forgery in attendance sheets significantly increased during the medical course. Fifth-year students not only disclosed more cheating than their peers, but also reported engaging in more severe behaviours, such as both forms of exam cheating, which is in line with other evidence (Hrabak et al., 2004; Monteiro et al., 2018).

Psychological well-being (PWB) traits exhibited weak associations with cheating. Autonomy inversely correlated with plagiarism, while having positive relations with others was positively associated with cheating in academic work and attendance sheets ($p < 0.05$). Students with lower autonomy may lack the ability to perform academic tasks independently (Whitley, 1998) and/or to regulate their behaviour (Blachnio, 2019), thus resorting to plagiarism more often. Conversely, students who report more positive relations may be prone to engage in academic cheating to help a friend (Monteiro et al., 2018;

Zhang et al., 2018), justifying it as selflessness (Rettinger and Kramer, 2009). Dimensions of PWB related to environmental mastery, purpose in life, personal growth and self-acceptance were not significantly correlated with academic misconduct ($p > 0.05$). Other evidence also reported no significant associations of self-esteem (linked to self-acceptance) (Tijdink et al., 2016) and openness to experience (a common trait of individuals with personal growth) (Giluk and Postlethwaite, 2015; Zhang et al., 2018) with cheating. Alternatively, students who perceive less ability to cope with environmental demands (Cochran, 2017) and lower expectations for the future (Korn and Davidovitch, 2016) were found to be more likely to engage in academic misconduct compared to those with higher sense of environmental mastery and life purpose, respectively.

No differences were observed in academic misconduct according to sex and previous participation in research ($p > 0.05$). Grade point average (GPA), only applicable for third and fifth-year students, was positively correlated with cheating prior exams ($p < 0.05$). Similar to other studies (Desalegn and Berhan, 2014; Hrabak et al., 2004; McCabe et al., 2001), cheating associated positively with perceived peer fraud and negatively with severity of penalty ($p < 0.01$).

CONCLUSION AND RECOMMENDATIONS

PWB traits exhibited poor associations with academic misconduct, yet this is the first study found to explore that, thus further studies with more diverse samples and instruments are recommended. Nonetheless, results suggest that promoting medical

students' autonomy (e.g., encouraging participation in decision-making) (Oz et al., 2016) may be useful in countering plagiarism, especially considering current Portuguese medical curricula emphasis on self-regulated learning (Patricio et al., 2012). Results also

offer some insight into the social structure around cheating, linked to positive relations and perceived peer fraud, increasing with academic year. Overall, fostering ethically responsible future physicians is

paramount, as in a cheating-permissive culture, medical students who disclosed dishonest behaviour are likely to perpetuate it during professional practice, undermining patient care (Papadakis et al., 2005).

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