

Emotional Maturity Among Medical Students and Its Impact on Their Academic Performance

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ABSTRACT: Emotional intelligence is a measure of our emotional strength to cope with our surroundings. Monitoring emotional intelligence and being aware of our own emotions shows people's emotional maturity. Assessing this quality of emotions is important for medical students to examine their overall ability to deal with their immediate world since they may have to confront end number of stressful situations in their profession. The emotional maturity explicitly has an impact on students' academic performance and is also an important aspect of professional development. Thus the study makes an effort to find out the influence of emotional maturity on academic performance among the year one and year two medical students of University Sultan Zainal Abidin (UniSZA). The study population included preclinical medical students of UniSZA from Year 1 and Year 2 of academic session 2015/2016. The convenient sampling technique was used to select the sample. Data were collected using 'Emotional Maturity Scale' to study the association between emotional maturity and academic performance. Out of 124 questionnaires only 10 response sheets were not complete, other 114 were complete. Among the study participants, 87 % and 27 % were males and females, respectively. The data were then compiled and analyzed using SPSS Version 22. The Carl Pearson's correlation coefficient method was carried out to find the significance of the association between the variables. The result revealed that there was a statistically significant positive correlation between emotional maturity and academic performance ($r = 0.783$, $p < 0.001$). Medical faculty members should lay more emphasis on these aspects thereby mending their students for better performance. Hence the researchers expect that the country will mold medical doctors into better professionals.

KEYWORDS: Emotional maturity; Medical students; Academic performance; Andragogy; Emotional intelligence

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INTRODUCTION

The main identifying characteristics of Emotional Maturity are studied with the help of the Emotional Intelligence components. **Self-awareness** is to recognize and understand the moods and motivations of people and their effect on others. To achieve this state, a person should be able to monitor his emotional state and identify his own emotions. *Emotional maturity in this trait* shows the confidence, sense of humor and awareness of one's own impression. **Self-Regulation** is the other component of emotional intelligence. Here people are able to control impulses, emotions and think before responding, and express themselves appropriately. *Emotional maturity in this trait* shows the conscientiousness and personal responsibility for one's own deeds and adaptability to change. When someone is complaining or is rude, a person with emotional intelligence responds in kind. This person responds in a manner which would not escalate the situation. **Internal Motivation** is marked by an interest in learning. It is also self-improvement vs. a pursuit for wealth and status. *Emotional maturity in this trait* shows the initiative and the commitment to complete task perseverance in the face of adversity.

Empathy is the ability to understand another person's emotional reaction. This is only possible when one has achieved self-awareness - as one cannot understand others until they understand themselves. *Emotional Maturity in this trait* shows the **perceptive** of other's emotions and taking an active interest in their concerns, **Pro activeness** is being able to anticipate someone's needs and the

appropriate reaction to social situations such as office politics. **Social Skills** is identifying social cues to establish common ground, manage relationships and build networks. *Emotional Maturity in this trait* shows communication - listening and responding appropriately, influence and leadership - the ability to guide and inspire others which also helps in conflict management and is yet another component of emotional intelligence. Here the person is able to diffuse difficult situations using persuasion and negotiation.

Negative emotional reactions tend to persist for unusually long periods of time. These problems in emotional regulation diminish the ability of a person to think with clarity, make decisions and cope with stress. These disturbances in psychological homeostasis affect the academic performance of a medical student. Lacking contentment in one's life achievements can correlate to high neuroticism scores and increase a person's likelihood of falling into clinical depression. The adaptation to medical training induces stress in students and negative emotionality gets inflated, which negatively influences their coping ability (Stults-Kolehmainen & Sinha, 2014; Kendall *et al.*, 2000).

At the commencement of medical school, students need to pose to demands which pave the way for their stress. Their stresses include living away from home, making the transition to a more independent living with less supported condition, and coping with student demands. Further, exposure to serious illnesses and deaths may provoke a stressful reaction in some students (Rabkin & Struening, 1976; Salleh, 2008).

Studies which have tried to identify the sources of stress among medical students generally point to three main areas: academic pressures, social issues and financial problems. The majority of stressful incidents in traditional curricula are related to medical training rather than to personal problems (Salam *et al.*, 2013; Rahman *et al.*, 2013).

Workload and feeling overwhelmed by the information load are major sources of stress. Fears of failing or falling behind are particular preoccupations (Rahman *et al.*, 2013). In the UK, the General Medical Council recommends that medical schools should have mechanisms in place to identify symptoms of stress that might be early signs of mental health issues or illness (Sharifirad *et al.*, 2012; Bhagat, 2013). Medical schools in the USA and Canada tackle the problem at an earlier stage by under taking prevention in the form of health promotion programs (Bhagat & Nayak, 2014). These interventions have been shown to reduce the effects of stress on medical students' health and academic performance (Barlow, 1984; Vitaliano *et al.*, 1984). Holding on to strong emotions requires a high degree of awareness because intense emotions can take over the power of reasoning. Maintaining awareness during the emotional processing will allow you to "ride the waves" (Grant *et al.*, 2013). Therefore, this study has made an effort to explore the influence of negative emotionality on Malay medical students' academic achievements in new medical schools in Malaysia and India.

METHODOLOGY

This was a cross-sectional study conducted on medical students of UniSZA. The study population included preclinical medical students of UniSZA from Year 1 to Year 2 of academic session 2015/2016. The sample size was 114 out of 124 preclinical medical students of Faculty of medicine, UniSZA; using sample size calculator (Creative Research System, 2012). 5% of the sample were found with incomplete response and were discarded. The convenient sample was used to select the sample group for the study. The questionnaires were distributed in the respective class rooms. This exercise was carried out soon after the professional development classes which were

part of the student curriculum after extending the time by half an hour. Prior consent was taken from the management as well as students for this exercise. The period of study was from October 2015 to April 2016. The data were collected using standardized and validated instrument. The instrument was purchased from National psychological corporation from Kachri ghat, Agra, India. Academic scores were collected from the academic office with the permission of higher authorities. The Emotional Maturity Scale was a standardized scale; the reliability and validity of the test were studied from different standpoints. The results were obtained by using different methods and they were confirmed with each other. The degrees of reliability ($>.84$) and validity coefficients ($>.57$) were found to be fairly high. Hence, it is concluded that the present test is reliable and valid. Emotional maturity is measured based on emotional instability, emotional regression, social maladjustment, personality disintegration and lack of independence. There was a range of statements under each area of emotionality and the core element of this leads to emotional maturity that was measured by Likert scale, giving a maximum score of 240. The mean of total score shows respondents' emotional maturity. The instrument consists of open ended questions on emotional maturity. The data were compiled and analyzed using SPSS Version 22. This research obtained the ethical approval from UniSZA Research Ethics Committee, 22 March 2015. Research ethics were strictly maintained, especially regarding confidentiality. Explanation concerning the purpose of the study was given, and informed consent was obtained verbally from the participants to utilize their data for research purposes. The academic scores were taken from academic office and the permission had been obtained from the authority.

The current research was totally anonymous and voluntary. Thus, researchers felt that verbal informed consent was sufficient. Objectives of the study are to evaluate emotional maturity scores of the chosen subjects and to assess the association between emotional maturity and academic achievement of these students'. Hypothetically it was viewed that there is a close association between emotional maturity and academic achievement which in turn influences the students' performance.

RESULT AND DISCUSSION

In the present study, convenient sampling method was applied to collect the data. Our sample size was 124 Years 1 and 2 medical students of UniSZA. The questionnaire was distributed to the students in the sample group at the end of their professional personality development lecture class on emotionality with their consent. Out of 124 questionnaires 10 were not complete and 114 returned after completing all the answers, giving a response rate of 92%. Among the study participants, 23.7% (27) and 76.3% (87) were male and female, respectively. A total of 52.6% (60), 18.4% (21), 28.1% (32), and 0.9% (1) of the study participants were from Malay, Chinese, Indian, and other races, respectively. A total of 53.5% (61), 17.5% (20), 26.3% (30), and 2.6% (3) study participants had their religion as Islam, Buddhism, Hinduism, and Christianity respectively. Again, the study participants were 50.9% (58), and 49.1% (56) from Year 1 and Year 2 respectively (Table 1). Our study demonstrated a strong correlation between emotional maturity and academic performance ($r= 0.783$, $p<0.001$). This finding is depicted in Table 2 as a statistically significant strong, direct linear correlation of academic scores with emotional maturity scores ($r= 0.783$, $p<0.001$) (Figure 1).

Our study group included 114 premedical students of UniSZA, the larger part being female and smaller part male. The socio demographic profile of these study participants includes participant's racial and religious backgrounds. This has been depicted in Table 1. Our study results showed that irrespective of their demographic backgrounds, the study participants showed significantly affected emotional maturity and its association with their academic score (Table 2). This is an initial stage of

the students wherein they enter into medical school and adapt to the system. One of the earlier studies has supported this fact. This supporting study has theorized that emotionality of the first year students is sensitive because it is a transitional period for these students to make more adaptation to their college life from their school life which can pave the way for arousing some anxiety related to their new venture. Since they have to adapt to the challenging demands of new patterns of behavior so as to meet the expectations of the university, they may experience emotional instability. While these emotions during the preclinical years were often intense, uncontrolled and seemingly irrational, there was an improvement in emotional behavior as they moved on to the clinical years (Extremera & Fernández-Berrocal, 2004).

Yet another study had come out with the similar view point that students entering to medical university commonly show emotional immaturity and their learning pattern is pedagogy type. To address the second objective of the study that is to understand and assess the differences between emotional maturity levels of first year and final year undergraduates, the findings of the aforesaid analysis show that the year 1 students faced psychosocial adjustment problems after entering college as compared to the final year students who had adjusted in the social milieu of college and thus became more emotionally stable (Sharma, 2012). This emotional immaturity impacted their academic scores. One of the supporting study articles integrates ideas from various perspectives in a comprehensive and interdisciplinary model that informs policy makers, administrators, and schools about the socio-emotional factors that act as both risk and protective factors for disadvantaged students' learning and opportunities for academic success. There were four critical socio-emotional components that influenced achievement of these students (Bronwyn *et al.*, 2002). The forecasted views in the hypothesis that emotional maturity has an impact on adult learning skills of medical students were statistically analyzed as depicted in Table 2. As per the predicted hypothetical views, the study result shows the significance. One other review article reveals the views that the understanding of the nature of emotions in the learning context may assist the learning process since every human using his reasoning "requires suitable facilitating emotions to be efficacious in their actions or reasoning in order to be a high achiever (Martha & Campbell, 2012).

They assert that for the mature students, non-traditional pedagogical approaches such as those focusing on employability and immediately relevant competencies are required. Andragogy similarly assumes that there are different learning characteristics and requirements for adults than for children, and therefore educational design for adults must be different than the pedagogical ones used for children. Thus medical schools should encourage adult learning in budding medical professionals. Psychological maturity exerts an impact on the entry to andragogy learning type. As a person matures emotionally and intellectually, his or her self-concept moves from that of a dependent human being to that of a self-directed one. This is an integral part of adult learning (Creative Research System, 2012).

Emotional maturity has five important areas which were measured in this study and the total of this yields the emotional maturity of student sample. Out of five major areas of emotional immaturity, two areas namely social maladjustment and personality disintegration did not show significance. Other areas such as emotional instability, emotional regression, social maladjustment, personality disintegration and lack of independence significantly correlated with adult learning. The area of emotional maturity has significantly impacted emotional instability thereby affecting the learning area of medical students; this fact has been supported by one of the earlier studies which revealed that neuroticism (emotional instability) reacts negatively to academic stress; this factor must have contributed to the low academic performance¹⁰. In addition, social mal adjustment due to immaturity paves the way to pedagogy.

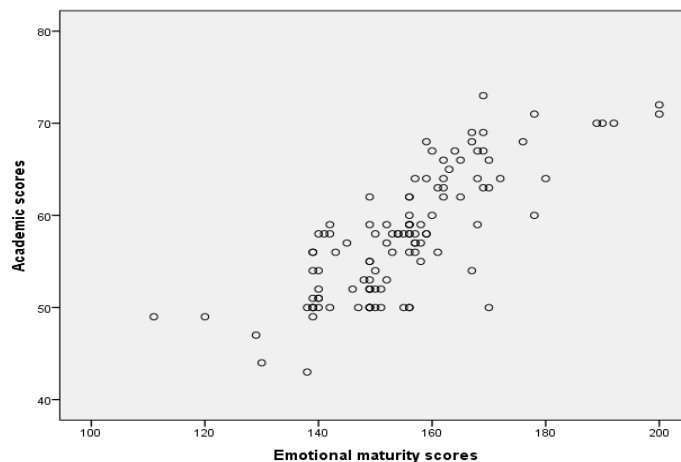
Table 1. Socio demographic profile of the study participants (N =114)

Variable	Frequency	%
(Socio demographic characteristics)		
Sex		
Male	27	23.7
Female	87	76.3
Race		
Malay	60	52.6
Chinese	21	18.4
Indian	32	28.1
Others	1	0.9
Religion		
Islam	61	53.5
Buddhist	20	17.5
Hindu	30	26.3
Christian	3	2.6
Educational background		
Year I	58	50.9
Year II	56	49.1

Table 2. Correlation between emotional maturity scores and academic scores (N =114)

Variable	Academic performance scores	
	r	p- value*
Emotional maturity scores	0.783	<0.001

*Pearson's correlation

**Figure 1.** Correlation between emotional maturity scores and academic scores (n =114)

LIMITATIONS OF THE STUDY

This is a cross-sectional study which has its own inherent limitations. Moreover, sample size was only 114. Hence, it is quite difficult to generalize the study findings. The students' genetic and intellectual aspects also contribute to their academic achievement. The current study did not explore

these areas because of time limit and scarcity of research fund. Therefore, more extensive research in this regard is advocated to promote and produce more holistic medical doctors for the community.

CONCLUSION AND IMPLICATION OF THE STUDY

This research concludes with suggestions that developing awareness of emotional intelligence and emotional maturity that influence the students' academic achievement learning will pave the way to develop enriched students' abilities. Therefore, our study promotes healthy professional personalities. Indeed introducing such programs in the medical universities may also develop the insight among the mentors of students who can mend their mentees' emotional behavior. The study results support the hypothetical view that there is an association between emotional intelligence and students' academic achievement. There by, this result theorizes the hypothetical view of the researchers. Moreover, the studies in the educational module can include developing awareness regarding emotional intelligence and emotional maturity and its applications which would be of significant advantage to medical students.

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