

Original Article

Correlation between Emotional Intelligence and Burnout amongst medical teachers of a Public Medical School in Lahore

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ABSTRACT

Introduction: Medical teachers in Pakistan are facing workplace stress leading to burnout, more so after the introduction of online teaching, since getting accustomed to the demands of online teaching is somewhat challenging. However, emotional intelligence may act as a buffer to being burned out.

Objective: This study aims to investigate the association of demographic factors with emotional intelligence with burnout and Determine if there is a correlation between emotional intelligence and burnout amongst medical teachers of pre-clinical sciences in a public medical college.

Method: A cross-sectional correlational study was conducted among medical teachers of pre-clinical departments of a public medical school in Lahore. To a total of 30 participants, the following questionnaires were given to fill: Trait Emotional Intelligence Questionnaire – Short Form to measure emotional intelligence, and the work-related version Burnout Assessment Tool to measure burnout levels.

Results: In total, 60% were females and 40% were males. 30% of these participants took more than 40 online classes. A significant difference was seen in the burnout scores amongst different designations. Amongst the different designations, Assistant/Associate Professors had the highest mean burnout score. The correlation coefficient between emotional intelligence and burnout scores obtained was $r = -0.578$ (p-value 0.01).

Conclusion: Emotional Intelligence and Burnout Levels are negatively correlated. Developing opportunities to help teachers improve their emotional intelligence and help them manage burnout at the workplace may optimize their productivity. It is suggested that workshops and awareness seminars be arranged as part of Faculty Development Programs for this purpose.

KEYWORDS: Emotional Intelligence, Burnout, medical teachers.

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INTRODUCTION

Emotional Intelligence (EI), simply put, is the capacity of individuals to evaluate and govern their emotions, as well as the emotions of those around them (Moreno-manso, 2020). This ability guides an individual to manage and maneuver the requirements of one's environment, such as at a workplace, and to address and cope with the requisites and pressures that go with it (Ravikumar et al., 2017).

To better understand the concept, let us deconstruct this phenomenon further. Emotional Intelligence can be further described as having 4 main domains. (1) Self Awareness, which means that an individual can recognize their own emotions and what effect those emotions may have on others around them. (2) Self-Management, which includes having the capability to measure and rein your actions. (3) Social Awareness, which

includes an individual's ability to appreciate and subsequently empathize with the emotions of those around them, and (4) Relationship Management is how well an individual can emotionally handle their relationship with others (Partido, 2020).

Individuals having higher levels of emotional intelligence are thus psychologically more resilient than others. They can better manage stressful situations and bring positivity as compared to those who have low emotional intelligence. It is suggested that emotional intelligence acts as a "stress buffer" (Lea et al., 2019).

Hence, it is safe to assume that individuals who have higher Emotional Intelligence serve to be better teachers. Medical studies are difficult. Teaching medicine to undergraduate medical students is thus quite challenging. This challenge has increased evermore since the implementation of online teaching as a permanent feature of the medical curriculum. Although in other parts of the world, online teaching and learning is a regular feature, the concept is relatively new here and untapped by professional medical teachers in Pakistan. That, combined

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with the ongoing and continually changing conditions of the Covid Pandemic requires a medical teacher to be more resilient and focused on training and teaching undergraduate medical students than ever before.

To understand the concept of Burnout, we must first understand what psychological distress is. Psychological distress is a displeasing and unwelcome state of emotion that an individual experiences due to the demands of their environment, causing mental unrest and discomfort (Saiful et al., 2021). Evidence shows that psychological distress is positively correlated to burnout (Guiyuan Zou, 2016). Burnout Syndrome is a condition in which an individual is physically and mentally exhausted (Abdelhafiz et al., 2020). It is a state in which a person feels emotionally outwitted and fatigued (Shen et al., 2015). A burned-out individual may feel inefficient and cynical about their work (Wang et al., 2019). When a medical teacher experiences burnout, it may mean that they feel no enthusiasm to teach. A feeling of being trapped and defeated ensues. The term “depolarization” is often mentioned concerning Burnout, which simply means the absence of empathy (Galaiya et al., 2020). In the context of this study, it means that a teacher who is burned out feels indifferent towards their students as well as co-workers and colleagues. This gives rise to the development of negativity towards their profession. These feelings eventually lead to feeling inefficient and withdrawn from one's responsibilities (Romani & Ashkar, 2014).

If and when a teacher's burnout increases, the overall quality of the learning experience of students suffers. Students' feelings and behavior towards the teacher and subsequently to what they teach suffers negativity and criticism. This results in an overall poor response of students towards their learning and greatly affects their motivation towards their studies (Shen et al., 2015).

What can cause burnout increased stress at work over a long period can lead to burnout syndrome (reference 13,30 from article 15) the increased stress may be due to the workload. This includes both qualitative and quantitative workload. Quantitative workload includes the number of tasks that need to be completed in a certain timeframe, whereas the Qualitative workload refers to the complexity of the task as well as the load of information which needs to be processed in a certain period. Limited evidence exists that shows whether levels of EI are related to levels of Burnout. Also, many kinds of research have been conducted to measure burnout amongst medical students (Saiful et al., 2021), (Kajjimu & Bongomin, 2021), nurses (Guiyuan Zou, 2016), and postgraduates (Ravikumar et al., 2017). The present study attempts to measure the burnout levels and emotional intelligence of medical teachers. This study aims to (1) Investigate the association of demographic factors with emotional intelligence with burnout (2) Determine if there

is a correlation between emotional intelligence and burnout amongst medical teachers of pre-clinical sciences in a public medical college.

METHODS

This is a cross-sectional correlational study conducted at the Services Institute of Medical Sciences, Lahore. The participants were selected on a non-probability convenience sampling, and a total of 30 medical college teachers of Basic and Pre-Clinical Sciences Departments were included to see the observed levels of emotional intelligence and burnout syndrome amidst online teaching and learning. Teachers of Clinical Sciences Departments were excluded. Informed consent and briefing were given to each participant and two questionnaires were distributed simultaneously, along with a questionnaire to determine demographics.

The first questionnaire was the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) designed to measure the emotional intelligence of participants (Palmer et al., 2009). It included 30-items on a seven points Likert Scale and was scored according to the given instructions (Zampetakis, 2011). The second questionnaire was the work-related version Burnout Assessment Tool (BAT) designed to measure burnout in individuals at the workplace. It included 30-items on a five-point Likert Scale, scored and translated into Low, Average, High, and Very High Burnout levels. This questionnaire is relatively new and has not been used in any similar researches I read (Schaufeli, 2020). It claims to measure aspects of burnout that are lacking in other measuring tools such as Maslach's Burnout Inventory- popularly used in studies similar to this.

The choice of instruments was based on the objectives of the study, as well as on their promising psychometric characteristics. Participant anonymity and confidentiality were ensured and the entire study was voluntarily conducted. Each participant was given a bag of chocolates by the researcher as a goodwill gesture.

The demographic questions included the participants' department, designation (ranging from Professor to Demonstrator), age, and gender. To calculate the approximate number of online classes each participant conducted, a question including five choices were included. The choices included less than 10 online classes conducted, 10 to 20, 20 to 30, 30 to 40, and more than 40 online classes conducted respectively. The data analysis was done by using SPSS version 26. Mean and SD was given for numeric data. Frequency and percentage were given for categorical data. The Shapiro-Wilk test assessed normality, and Pearson's Correlation test was run to determine the correlation between Emotional Intelligence and Burnout. The P-value of ≤ 0.05 is taken as significant.

RESULTS

The mean age of the participants was 41 ± 1.0 , out of which 18 (60%) were females and 12 (40%) were males. 15 of the participants (50%) were Demonstrators & Senior Demonstrators, 14 (49%) of them were Assistant & Associate Professors, and only one participant was a professor. 30% of these participants took more than 40 online classes since the Academic Year commenced (January 2021).

No significant difference was seen in the burnout scores amongst different ages, number of online classes taken and between genders, however, a significant difference was seen in the burnout scores amongst different designations (Table I).

Table I: Comparison of Burnout Score among age, gender, rank, and number of online classes taken	
Group	p-value
Gender	0.213
Age	0.064
Number of Online Classes	0.133
Rank/Designation	0.041

Amongst the different designations, Assistant/Associate Professors had the highest mean burnout score (Table II).

Table II: Burnout scores across different rank/designations of participants	
Rank/Designation	Burnout Score
Professor	Low
Associate Professor	Average
Assistant Professor	High
Senior Demonstrator	High
Demonstrator	Low

There was no significant difference in emotional intelligence score with gender, age, or rank of participants (Table III)

Table III: Comparison of emotional intelligence score amongst age, rank/designation, and gender	
Group	p-value
Gender	0.731
Age	0.692
Rank/Designation	0.061

The correlation coefficient was obtained by running Pearson's Correlation Test in SPSS 26 between emotional intelligence and burnout scores. The r-value obtained was $r = -0.578$ (p-value 0.01). The significant negative correlation shows that the higher the emotional intelligence score of an individual, the less is his/her burnout score.

DISCUSSION

Emotionally smart individuals have lesser mood swings and jump back from stresses and challenge quicker. They give a "response"

instead of a "reaction" to situations and occurrences. This statement is interesting to behold because when an individual reacts to a certain situation, they usually have less control over the actions which are a consequence of that reaction. Whereas, a response of an individual is controlled and measured and usually comes after a thinking process given to a certain situation.

So, why pay so much attention to emotions and degrees of Emotional Intelligence with an individual's professional performance? Studies in neurosciences provide scientific evidence that a person's uniqueness can be attributed to what they feel, what they think, and how they act, and how these three entities interact with each other. Emotions and feelings can affect an individual's work stamina (Moreno-fernandez et al., 2020).

The theory of Emotional Intelligence also concludes that individuals with high Emotional intelligence have better communication skills and are more apt at interpersonal relationships (Weng et al., 2011).

Our results show a significant difference in burnout scores amongst designations of teachers, with high burnout scores seen in assistant and associate professors, who carry the chunk of responsibility, ranging from planning the curriculum to implementing it effectively. Moreover, most of them are also struggling with their postgraduation studies as well. Where no significant difference was seen in emotional intelligence amongst age, designation, and gender of participants, however, it can be seen in the results (Table 3) that a difference may lie amongst the designations, which may translate into the experience of a teacher.

A somewhat similar analysis to my research was done by Tijdkink et.al in The Netherlands, in which a nationwide survey of medical professors was conducted to measure emotional exhaustion and burnout. The research concluded that early-career medical professors had higher scores of emotional exhaustion and hence were more prone to developing burnout (Tijdkink et al., 2014).

A study conducted by Shen et.al to measure the relationship between teacher burnout and student motivation concluded that the teachers' burnout status is a significant environmental factor that affects the degree of motivation in students. However, this study was done on high school students and their teachers (Shen et al., 2015). Similar research can be done using medical students and teachers as participants.

Chinese undergraduate medical students showed high levels of empathy and low levels of burnout results; with more satisfaction with life in a cross-sectional study conducted by Wang et.al concluded (Wang et al., 2019).

A Lebanese cross-sectional study aiming to assess the relationship of burnout with some psychological traits and emotional intelligence explored the different factors which

correlate with them. It suggested that to combat emotional exhaustion, a change must be made in organizational structures to limit the workload (Lahoud et al., 2019).

This hypothesis was further explored by Partido and Owen. They observed the relationship between emotional intelligence, stress, and burnout amongst dental hygiene students. The variables were measured in a cross-sectional study, which concluded, amongst other results, that empathy and self-awareness, which are subcomponents of emotional intelligence, were significant predictors of emotional intelligence (Partido, 2020).

Another systematic review explained that several experimental studies performed on emotional intelligence and stress showed that high emotional intelligence acts as a “buffer” to stress (Lea et al., 2019). A similar systematic review of factors associated with burnout in surgeons showed that young female residents suffer higher levels of burnout. High levels of emotional intelligence, mentorship, and certain personality types may act as buffers to burnout. Hence, workload and job demands may be re-evaluated to decrease burnout. Apart from emotional intelligence, resilience and mindfulness may also help reduce burnout (Galaiya et al., 2020).

More recently, a cross-sectional; study conducted on second-year undergraduate medical students of Malaysia aimed to understand the interrelations of psychological distress, emotional intelligence, personality traits, academic stress, and burnout. The results showed that burnout increased with increased levels of psychological stress, which in turn had a positive correlation with burnout. It also concluded that a positive correlation exists between neuroticism and burnout, and a significant correlation exists between emotional intelligence and burnout (Saiful et al., 2021). In Lahore, Pakistan, Butt et.al measured burnout in postgraduate trainees and consultants working in Psychiatry departments of the same teaching hospitals. They not only assessed burnout but also how it affected their levels of personal achievements. In their study, the results showed that despite burnout, doctors were still able to do their job effectively (Butt et al., 2021).

This leads us to believe that if we aim to train medical students in their academic years to develop emotional intelligence and manage environmental stresses, they will be better able to cope with their work-related stresses once they become medical teachers. Emotional intelligence buildup and burnout-preventing mechanisms may be included in the medical curriculum of both undergraduate and postgraduate medical studies since most postgraduate trainees in Pakistan are medical teachers as well. I found a very useful article in this regard. It explained ten quick and smart strategies to build emotional intelligence and prevent burnout (Goren, 2018).

CONCLUSION

The results reveal that emotional intelligence has significant effects on burnout, which may consequently have detrimental effects on the quality of teaching. A burned-out medical teacher will not make a medical student's educational experience worthwhile. That, combined with the added stresses of online teaching and learning makes matters worse. More efforts may be made by the institute's stakeholders to help medical teachers cope with the challenges of online teaching as well as make their workplace more comfortable. Regular workshops and seminars designed around developing emotional intelligence and preventing burnout may be conducted as part of Faculty Development Programs. Awareness will lead to solutions.

Strengths and Limitations

It is important to mention that this research was conducted on medical teachers of a public medical college, hence the results cannot be generalized, especially because private medical college setups have contrastingly different workplace dynamics. Longitudinal studies conducted in the future will serve to give better, more generalized results. The response bias and social desirability bias cannot be avoided in the method of data collection administered.

Despite the limitations, this study has several strengths. First, the variables were measured using reliable and valid measuring tools. Second, a recently introduced and published valid questionnaire was used to measure burnout, which claims that it covers aspects of burnout at a workplace exclusively and includes many sub-components of burnout than other tools lack. Third, the statistical analysis was performed using standard reliable software, hence the results are trustworthy and comparable with other studies. Lastly, as far as the authors are aware, such a study has not been done using medical teachers of basic science departments as participants in a public medical college of Lahore, Pakistan.

DECLARATION

The author report no declaration of interest.

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REFERENCES

- Abdelhafiz, A. S., Ali, A., Ziady, H. H., & Maaly, A. M. (2020). Prevalence, Associated Factors, and Consequences of Burnout Among Egyptian Physicians During COVID-19 Pandemic. *Frontiers in Public Health*, 8(December), 1–9. <https://doi.org/10.3389/fpubh.2020.590190>

- Butt, A., Rehman, S., & Rahman, M. (2021). Burnout in Postgraduate Trainees and Consultants working in Psychiatry Departments of Teaching Hospitals in Lahore, Pakistan. *Esculapio*, 17(1), 83–87. <https://doi.org/10.51273/esc21.2517117>
- Galaiya, R., Kinross, J., & Arulampalam, T. (2020). Factors associated with burnout syndrome in surgeons : a systematic review. *Royal College of Surgeons*, 1–8. <https://doi.org/10.1308/rcsann.2020.0040>
- Goren, L. (2018). Ten Strategies for Building. In *American Academy of Family Physicians* (Issue February, pp. 11–14). fpmedit@aafp.org
- Guiyuan Zou, X. S. (2016). Correlates of Psychological Distress, Burnout, and Resilience among Chinese female nurses. *South African Medical Journal*, 57(12), 433. <https://doi.org/10.2486/indhealth.2015-0103>
- Lahoud, N., Zakhour, M., Haddad, C., Salameh, P., Akel, M., Fares, K., Hallit, S., & Obeid, S. (2019). Burnout and Its Relationships With Alexithymia, Stress, Self-Esteem, Results From a Lebanese Cross-Sectional Study. 207(8). <https://doi.org/10.1097/NMD.1017>
- Lea, R. G., Davis, S. K., Mahoney, B., & Qualter, P. (2019). Does emotional intelligence buffer the effects of acute stress? A systematic review. *Frontiers in Psychology*, 10(MAR), 1–19. <https://doi.org/10.3389/fpsyg.2019.00810>
- Moreno-manso, J. M. (2020). Quality of Working Life, Psychosocial Factors, Burnout Syndrome and Emotional Intelligence. *International Journal of Environmental Research and Public Health*, 17(9550), 1–15. <https://doi.org/10.3390/ijerph17249550>
- Palmer, B. R., Stough, C., Harmer, R., & Gignac, G. (2009). Assessing Emotional Intelligence (pp. 103–117). <https://doi.org/10.1007/978-0-387-88370-0>
- Partido, B. B. (2020). Relationship between emotional intelligence, stress, and burnout among dental hygiene students. *Journal of Dental Education*, 2020, 1–7. <https://doi.org/10.1002/jdd.12172>
- Ravikumar, R., Rajoura, O. P., Sharma, R., & Bhatia, M. S. (2017). A Study of Emotional Intelligence Among Postgraduate Medical Students in Delhi. *Cureus*, 9(1), 1–10. <https://doi.org/10.7759/cureus.989>
- Romani, M., & Ashkar, K. (2014). Burnout among physicians. *Libyan Journal of Medicine*, 9, 1–6. <https://doi.org/10.3402/ljm.v9.23556>
- Saiful, M., Yusoff, B., Nurma, S., Hadie, H., Azhar, M., & Yasin, M. (2021). The roles of emotional intelligence, neuroticism, and academic stress on the relationship between psychological distress and burnout in medical students. *BMC Medical Education*, 21(293), 1–10. <https://doi.org/10.1186/s12909-021-02733-5>
- Schaufeli, W. B. (2020). Burnout Assessment Tool (BAT)—Development, Validity, and Reliability. *International Journal of Environmental Research and Public Health*, 17(9495), 1–21. <https://doi.org/doi:10.3390/ijerph17249495>
- Shen, B., Mccaughy, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *The British Psychological Society*, 85, 519–532. <https://doi.org/10.1111/bjep.12089>
- Tijdink, J. K., Vergouwen, A. C. M., & Smulders, Y. M. (2014). Emotional exhaustion and burnout among medical professors ; a nationwide survey. *BMC Medical Education*, 14(183), 1–7. <https://doi.org/http://www.biomedcentral.com/1472-6920/14/183>
- Wang, Q., Wang, L., Shi, M., Li, X., Liu, R., Liu, J., Zhu, M., & Wu, H. (2019). Empathy, burnout, life satisfaction, correlations and associated socio-demographic factors among Chinese undergraduate medical students : an exploratory cross-sectional study. *BMC Medical Education*, 19(341), 1–10. <https://doi.org/10.1186/s12909-019-1788-3>
- Zampetakis, L. A. (2011). The measurement of trait emotional intelligence with TEIQue-SF: An analysis based on unfolding item response theory models. In *Research on Emotion in Organizations* (Vol. 7, Issue January 2011). Emerald Group Publishing Ltd. [https://doi.org/10.1108/S1746-9791\(2011\)7016](https://doi.org/10.1108/S1746-9791(2011)7016)

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