

Relationship Between Emotional Intelligence Perceived Stress and Coping Styles Among Medical Interns

Varenya Menon¹, Anuja Deshpande²

¹Post Graduate Student M.A. Degree in Psychology (Counselling), Maniben Nanavati Women's College, Mumbai.

²Faculty, Department of Psychology, Maniben Nanavati Women's College, Mumbai.

Corresponding author: Anuja Deshpande

Email: dranujadeshpande18@gmail.com

ABSTRACT

Background: The outbreak of Covid-19 brought major changes to everyone's lives. The healthcare workers uninterruptedly continued to work in such critical situations, making them not only highly sensitive towards the infection but also towards developing psychological stress and other mental health symptoms. Amongst the healthcare workers were Medical Interns who dealt with problems such as long working hours, lack of personal protective equipment, lack of specific drugs and many academic, professional, and personal factors. The current study aimed to understand the relationship between Emotional intelligence, Perceived stress and Coping styles among medical interns.

Methodology: The study was conducted on 61 Medical interns across India, who were in their final year or had completed medical school and were interning under professional supervision. The study followed a simple procedure, the data collection and administration of the instruments happened in the following manner: The informed consent was taken. Post which the basic demographic details; and an informal questionnaire to understand the participants overall experience were collected. It was then followed by the three scales measuring each of the variables of the study The Schutte Self-Report Emotional Intelligence Test, Perceived Stress Scale and The Coping Inventory for Stressful Situations.

Results: The data analysis procedure, descriptive and inferential statistics, aimed at looking for relationships between the variables. The study found a significant relationship between Emotional Intelligence and Perceived Stress. Perceived stress was found to have no significant correlation with Task oriented coping styles but had positive correlation with Emotion-oriented coping and negative correlation with Avoidance-oriented coping style.

Conclusions: Emotional intelligence had a positive correlation with Task-oriented coping style and a negative correlation with Avoidance-oriented coping. No significant relationship was found between emotional intelligence and Emotion-oriented coping style.

Keywords: Emotional Intelligence, Perceived Stress, Coping styles, Medical Interns.

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INTRODUCTION

The way we perceive stress plays a very big role in the way we choose to cope with the stressors in our environment. A growing body of empirical evidence suggests that emotional intelligence can have an impact on how one perceives stress and in effectively coping with the stressor [1]. Emotional intelligence as defined by Salovey and Mayer in 1990, is an individual's ability to perceive, understand, and manage one's own emotions and others. As feelings take over thoughts while making decisions, the emotional mind is believed to be faster than the rational mind. This research paper is to give an understanding of the relationship between emotional intelligence, perceived stress and coping styles among medical interns [2].

Perceived Stress can be defined as the thoughts and feelings of an individual towards how much stress they are under at a point in time or over a given period. Perceived stress can be understood as an individual's

experienced level of stress as a function of objective stressful events, coping processes, personality factors, etc [3]. Large bodies of studies in the last few decades have provided evidence that there is a prevalence of high perceived stress amongst medical interns [4]. Studies have also shown that high exposure to stressful events among medical personnel can manifest itself in several different outcomes such as depression, anxiety, self-doubt, post-traumatic stress disorder, loss of sleep, impairing immune function, the elevation of cardiovascular risk factors, burn out and disturbed relationships with family [5].

The emergence of the novel coronavirus, put the healthcare workers under tremendous pressure as they are dealing with many problems such as long working hours, lack of personal protective equipment, lack of specific drugs and protocols, and being away from family. According to previous papers, during the outbreaks of Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS), frontline medical staff had reported high levels of stress resulting in posttraumatic stress disorder (PTSD)[6-7].

Findings have also shown that the major sources of stressors amongst medical interns involve heavy workload, less leisure time, competitive environment and exams, uncertainty about being accepted in the preferred specialty and the high expectations of the teaching staff [8].

Large bodies of research in the last few decades have shown prominent evidence of high perceived stress among medical students [9]. Another study conducted to understand perceived stress in medical students during the clinical years found an overall prevalence of stress of 71.7%, indicating a high prevalence of stress in these students [10]. Similarly, another study found that perceived stress among medical interns, found that the degree of stress was significantly higher among interns as compared to 1st, 2nd, and 3rd year MBBS students [11]. Residency period also comprises impactful stressors, except for their immediate “survival” needs, they also need to cover educational and patient care needs.

Several studies have shown that emotional intelligence plays an important role in the way one perceives stress. For example, a study was done to understand the relationship between Emotional Intelligence and Stress amongst undergraduate Medical Students. A total of 238 undergraduate medical students, where 73 were males, 165 were females, participated in this study. The findings showed that using emotions intelligently by the medical students helps them towards stress, the results pointed towards the need for enhancement of emotional intelligence which can lead to managing stress in a better way [12].

Similarly, another study was done to understand the relationship between burnout, emotional intelligence and perceived stress on residents in the departments of medicine (n=29) and surgery (n=27). The findings showed a negative correlation between Perceived stress and Emotional intelligence and concluded that enhancing Emotional intelligence through training may be an important intervention for stress which can moderate burnout [13]. A study was done to understand the relationship between emotional intelligence and stress, anxiety, and depression in a sample of resident physicians. Findings of this study showed that there was a negative association between EI and stress, anxiety, and depression was seen in the resident physicians. High scores in emotional intelligence were associated with low scores on stress, anxiety, and depression among all the age groups, gender, marital status, and field of work [14]. Studies have also shown that emotional intelligence can influence the stress-burnout relations among healthcare workers. For example, a study was done to investigate the inter-relationships between the emotional intelligence, stress and burnout in a group of nurses in the Western Cape Province of South Africa. The findings showed that there was a significant relationship between Higher emotional intelligence and lower stress and burnout in the sample of 122 nurses working in different wards at four hospitals. The moderator effect of EI in the stress–burnout relationship suggests that enhancement of emotional intelligence may help in preventing burnout development when chronic stress is experienced [15].

A study was done to understand the Impact of Emotional Intelligence on Job Performance During COVID-19 Crisis. The findings done on 40 nurses from three tertiary hospitals showed that there were moderate relations between emotional intelligence and job performance, and the latter could be affected by how some nurses perceive their emotions [16].

Another study that aimed to analyse the effect of psychosocial risks and emotional intelligence on nurses' health, well-being, burnout level, and job satisfaction during the rise of COVID-19 pandemic in Spain, pointed out to a protective effect of emotional intelligence against the adverse effects of psychosocial risks such as burnout, psychosomatic complaints, and a favourable effect on job satisfaction [17].

Even though a number of research show the importance of the relationship of emotional intelligence and perceived stress, where emotional intelligence has shown to act as a moderator, there are some research papers that has given contrary findings. For example, a study was done to assess the relationship between emotional intelligence and perceived stress among undergraduate students in a dental institution in India. A total of 316 study subjects participated in the study and their emotional intelligence and perceived stress were assessed by using the Schutte Self-Report Emotional Intelligence Test (SSREIT) and the modified Dental Environment Stress (DES) scales respectively. The results indicated that EI and perceived stress did not relate directly and there might be a different relationship between these variables, which requires further research [18].

As mentioned earlier various research have shown the evidence of high perceived stress among healthcare workers [19]. A study done to understand the psychological impact of the COVID-19 pandemic on health care workers showed a high prevalence of anxiety, depression, and moderate stress among healthcare workers, regardless of their job specifications [20]. Another study conducted on 240 healthcare professionals (doctors, nurses, healthcare assistants) during the covid-19, found that the stress, anxiety, and burnout of healthcare workers caring for COVID-19 patients affected their quality of life [21].

Similarly, another study done to understand perceived stress and coping mechanisms among medical students from a medical school in south India, found that nearly one third of the medical students were either moderately stressed (14.1%) or suffered from severe stress (15.5%). Students were then using active-coping, instrumental support, positive reframing, and planning as methods in medium amount. Self-distraction, self-blame, religion, use of emotional support, venting and substance use were some of the coping mechanisms that were used a little bit. Some of the coping mechanisms that were least used by students were humour, denial, and behavioural disengagement [22]. A study conducted to outline the stress profile as perceived by intern doctors and residents from a tertiary care hospital in South India and to explore methods employed to cope with workplace stress. Reported stress by 78.3% and 75% of Intern and resident doctors respectively. Excessive workload was the leading cause of stress among intern and resident doctors. 33.3% of residents resorted to unhealthy coping mechanisms to stress as against 8% in Interns. 18.3% of intern doctors were unaware of means to cope with stress [23].

A study was conducted to understand the relationship between coping strategies used by healthcare and emergency workers in Italy to manage the stress factors related to the COVID-19 emergency. The study found that the health worker group involved in the treatment of COVID-19 were exposed to greater levels of emergency stress and arousal and were willing to use problem-focused coping [24].

Similarly another study conducted to assess the correlations between emotional intelligence and stress coping strategies of medical residents showed that a positive correlation was observed between emotional intelligence and adaptive stress coping strategies, while a negative correlation was observed between emotional intelligence and maladaptive stress-coping strategies [25]. Another study studied emotional intelligence, perceived stress and coping in final year medical undergraduates. The study concluded with the findings that emotional intelligence had a negative correlation with perceived and mental stress, maladaptive coping behaviour (escape avoidance) and that a positive correlation with adaptive coping style [26].

A study done to understand the Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak showed that nurses who had stronger emotional responses and were more willing to adopt problem-focused coping than nursing the others. This study further explores the relationship between emotional responses and coping strategies. There may be a cycle of "more coping-more panic" among nurses that is it was found that anxiety, fear, and anger were significantly positively related to problem-focused coping and emotion-focused coping. That is to say, there may be "the more coping the more panic" or "the more panic the more coping" or the "coping-panic cycle" phenomenon [27].

A study was done on undergraduate nursing students to evaluate the relationship between emotional intelligence (EI), coping mechanisms and perceived stress. The study involved an overall of 147 students and The Perceived Stress Scale (PSS), the Brief COPE and the Schutte Self-Report Emotional Intelligence Test (SSEIT) were used to collect data. The findings showed that there was a negative relationship between emotional intelligence and perceived stress. This results also found that as emotional intelligence increases, perceived stress in the undergraduate nursing student decreases, higher emotional intelligence tends to utilize adaptive coping mechanisms while those with lower emotional intelligence utilize maladaptive coping

mechanisms. Also, students who had lower perceived stress scores typically utilized adaptive coping, while maladaptive coping was used in students who had higher perceived stress [28].

The aim of the study was to study the relationship between Emotional intelligence, Perceived Stress and Coping Styles among Medical Interns. It also aimed to understand the relationship between Emotional intelligence and perceived stress among Medical Interns, to understand the relationship between Perceived Stress and Emotion-oriented coping among Medical Interns and to understand the relationship between Emotional Intelligence and the different Coping styles among Medical Interns.

METHODOLOGY

Research Questions

The following were the research questions:

- Is there a significant relationship between Emotional Intelligence and Perceived Stress among Medical Interns?
- Is there a significant relationship between Perceived Stress and Coping Styles among Medical Interns?
- Is there a significant relationship between Emotional Intelligence and Coping styles among Medical Interns?

Hypotheses

The hypotheses of the study were as follows:

1. There will be a negative correlation between Emotional Intelligence and Perceived Stress among Medical Interns.
2. There will be a significant relationship between Perceived Stress and the different Coping Styles among Medical Interns.
 - a. There will be a negative correlation between Perceived Stress and Task-oriented coping among Medical Interns.
 - b. There will be a positive correlation between Perceived Stress and Emotion-oriented coping among Medical Interns.
 - c. There will be a positive correlation between Perceived Stress and Avoidance-oriented coping among Medical Interns.
3. There will be a significant relationship between Emotional Intelligence and the different Coping Styles among Medical Interns.
 - a. There will be a positive correlation between Emotional Intelligence and Task-oriented coping among Medical Interns.
 - b. There will be a negative correlation between Emotional Intelligence and Emotion-oriented coping among Medical Interns.
 - c. There will be a negative correlation between Emotional Intelligence and Avoidance-oriented coping among Medical Interns.

Operational definitions

1. Emotional intelligence as measured by the score on the Schutte Self-Report Emotional Intelligence Test (SSEIT) by Nicola S. Schutte [29].
2. Perceived Stress as measured by the score on the Perceived Stress Scale by Sheldon Cohen [30].
3. Coping Styles as measured by the score on the Coping Inventory for Stressful Situations (CISS-short) by Endler and Parker [31].

Participants

Sample: The sample involved a maximum of 61 Medical interns, who were in their final year or who had completed medical school and were interning under professional supervision and guidance within India. The participants were under the age of 32 years (Mean= 24.33; SD= 1.758).

Inclusion Criteria:

1. Participants who were in their final year or who had completed medical school (MBBS) and were interning under professional supervision were included.
2. Had been practicing for the last 2 months amidst the pandemic.
3. Participants who were involved in the treatment of covid-19 patients are included.
4. Medical interns up to the age of 32 years were included.

Exclusion Criteria:

1. Participants who completed medical schooling out of India were not included.
2. Participants pursuing or who completed medical schooling in the field of Ayurveda or Homeopathy will not be included.
3. Participants trained in paramedics will not be included.

Sampling method

The following study required Interns pursuing MBBS and were not open to other areas of medicine. The age criteria were also limited to 32 years. As the participants had to meet a certain criterion for qualifying as participants, Purposive sampling technique was used. From these people recruited through purposive sampling, snowball sampling started wherein they further forwarded the google forms to others' meeting the criteria, with the researcher's knowledge. The sampling techniques used were an amalgamation of both purposive and snowball sampling techniques.

Instruments used:

The following were scales used in the study:

- **The Schutte Self-Report Emotional Intelligence Test (SSEIT)** was given by Nicole Schutte in the year, 1998. It is a 33 item scale measuring the general Emotional Intelligence (EI) of the participant and has four subscales i.e.. emotion perception, utilizing emotions, managing self-relevant emotions and managing others' emotions. It has a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree) and the total score was obtained by grading and adding together the scores of each sub test. The internal consistency analysis showed Cronbach's alpha of 0.90 and two-week test-retest reliability was 0.78. Validation of the scale was assessed through a series of studies. The scale showed evidence of predictive validity and showed evidence of discriminant validity [29].
- **Perceived Stress Scale** was given by Sheldon Cohen in the year 1983 and is an instrument to measure the perception of stress in the past month. The 10-item version was used, and it was a Likert scale ranging from 0 (never) to 4 (very often). The scores are computed by reverse scoring items which are positively framed and then summing all the items on the scale. The scale had demonstrated adequate internal consistency. The test had adequate test-retest and internal reliability along with convergent validity with PSS-14. The scale also correlated with life-event scores, depressive and physical symptomology, utilisation of health services, and social anxiety [30].
- **The Coping Inventory for Stressful Situations (CISS-21)** was given by Endler and Parker in the year 1999. This 21-item coping scale consisted of three basic coping strategies (sub scales): Emotion-oriented, Task-oriented and Avoidance coping. Participants were asked to rate each item on a five-point scale ranging from 1 (not at all) to 5 (very much). The scores for each scale were calculated separately as it did not encourage an overall score. The scale showed sound psychometric properties with a Cronbach's alpha at $>.70$ and test-retest reliability of $>.70$. The scale also showed evidence of criterion validity [31].

Procedure

Once the research idea and the variables were finalized and permission to use the scales to measure the variables, were taken from the respective authors. The research proposal was finalized and once approved, the google forms were created and sent to possible participants that met the study criteria. The data collection and administration of the instruments happened in the following manner: The google forms firstly asked for informed consent. Post which followed basic demographic details; and an informal questionnaire to understand the severity of the pandemic and its impact on them, details on their working hours and coping mechanisms were asked and their overall experience were collected via a basic details form. It was then followed by the three scales measuring each of the variables of the study. Participants were asked to only

share their initials thereafter maintaining anonymity. The data collection was carried out online by using Purposive and Snowball sampling techniques. Participants who did not meet the criteria had to submit the forms without proceeding ahead. Each participant was debriefed about the study and were also asked to contact the researcher if they had any further queries. After obtaining the data, suitable statistical operations were carried out.

Ethical guidelines

- Informed consent was obtained from the participants, agreeing on voluntary participation in the study. The participants were informed about their right to withdraw out of the study at any point in time.
- The information obtained from the participants was used only for the relevant purpose of the study.
- Anonymity and Confidentiality with respect to the participant's details were maintained.
- Permissions from the authors of the copyrighted scales that were not available in the public domain, was sought . Approval was obtained from the authors for using the respective scales.
- The scales used in the did not have any sensitive material or shall not cause harm of any kind to the participant.

Statistical Analysis

The data was collected from a sample of 61 participants, across India. The next step after data collection was to test the hypotheses of the study, wherein, descriptive, and inferential statistics were employed. The normality of the data was established, and the test assumptions were met. Pearson product moment correlation was carried out to understand the relationship between the variables.

Table 1: Mean and Standard Deviations for all the variables

Variables	Mean	Standard Deviation	N
Emotional Intelligence	125.62	11.848	61
Perceived Stress	22.21	3.441	61
Task-oriented coping style	27.02	4.209	61
Emotion-oriented coping style	24.23	5.883	61
Avoidance-oriented coping style	25.89	5.788	61

The statistical properties of the variables are depicted in Table 1 for the entire sample. The mean for Emotional Intelligence was found to be 125.62 followed by a standard deviation of 11.848, as measured by the Schutte Self-Report Emotional Intelligence Test (SSEIT). The mean for Perceived Stress, as measured by the Perceived Stress Scale was found to be 22.21, followed by a standard deviation of 3.441. Coping styles as measured by the Coping Inventory for Stressful Situations, consists of three subscales. The mean and standard deviation for Task-oriented coping style was found to be 27.02 and 4.209. The mean for Emotion-oriented coping style was found to be 24.23 and the standard deviation was 5.883. The mean obtained for Avoidance-oriented coping style was 25.89, followed by a standard deviation of 5.788.

Table 2: Correlation Analysis between Emotional Intelligence, Perceived Stress and Coping styles

	Emotional Intelligence	Perceived Stress	Task-oriented coping style	Emotion-oriented coping style	Avoidance-oriented coping style
Emotional Intelligence	-----				
Perceived Stress	-0.302** <0.001	-----			
Task-oriented coping style	0.460** <0.001	-0.197 0.128	-----		

Emotion-oriented coping style	-0.064 0.623	0.397** 0.002	0.017 0.894	-----	
Avoidance-oriented coping style	-0.528** <0.001	-0.257* 0.046	0.339** 0.008	0.063 0.630	-----

*Correlation is significant at 0.05 level (2-tailed)

** Correlation is significant at 0.01 level (2-tailed)

As depicted in Table 2, a correlation analysis was done to see if the variables of the study were related to each other. There was a significant correlation between Emotional Intelligence and Perceived Stress, where the value of $r = -0.302^{**}$ and $p = <0.001$. The findings hence validate the hypothesis that there will be a negative correlation between Emotional Intelligence and Perceived Stress among Medical Interns. There is no significant relationship between Perceived Stress and the first subscale i.e. Task-oriented coping style with $r = -0.197$ and $p = 0.128$. This invalidates the hypothesis which states that there will be a negative correlation between Perceived Stress and Task-oriented coping among Medical Interns.

There is a significant relationship between the second subscale, Emotion-oriented coping style and Perceived Stress, where the value of $r = 0.397^{**}$ and $p = 0.002$. This validates the hypothesis that there will be a positive correlation between Perceived Stress and Emotion-oriented coping among Medical Interns. The third subscale Avoidance-oriented coping style had a significant negative correlation with Perceived Stress, where $r = -0.257^*$ and $p = 0.046$. The findings are not in line with the hypothesis which states that there will be a positive correlation between Perceived Stress and Avoidance-oriented coping among Medical Interns. As shown in table 2, there was a significant positive relationship between Emotional intelligence and the first subscale i.e., Task-oriented coping style, where $r = 0.460^{**}$ and they are significant at $p = <0.001$. This validates the hypothesis which states that there will be a positive correlation between Emotional Intelligence and Task-oriented coping among Medical Interns.

The second subscale, Emotion-oriented coping style, does not seem to have a significant relationship with Emotional intelligence, where $r = -0.064$ and $p = 0.623$. Thereby invalidating hypothesis which states that there will be a negative correlation between Emotional Intelligence and Emotion-oriented coping among Medical Interns. There was a significant positive correlation between the third subscale Avoidance-oriented coping style and Emotional Intelligence, where $r = -0.528^{**}$ and $p = <0.001$. The findings are in line with the hypothesis which states that there will be a negative correlation between Emotional Intelligence and Avoidance-oriented coping among Medical Interns.

DISCUSSION

Recent studies conducted during the pandemic across the globe, reported healthcare workers suffering from increased stress to psychological distress, anxiety, depression, insomnia, and other mental health issues [32-33]. This not only leaves an impact on their professional life but also on their mental wellbeing. Previous studies have shown the importance of Emotional intelligence in perceiving stress and choosing coping strategies. However, very little is known about the relationship between the variables among medical interns. The results of the study showed that there was a low negative correlation between Emotional Intelligence and Perceived Stress. This means that there will be an inverse relationship between the two variables, where when one variable increases, the other decreases and vice versa.

Previous literature has supported similar understandings. A study showed that using emotions intelligently by medical students helped them towards stress, the results pointed towards the need for enhancement of emotional intelligence which can lead to managing stress in a better way [12]. Another study findings, showed that there was a negative association between Emotional Intelligence and stress, anxiety, and depression was seen in the resident physicians. High scores in emotional intelligence were associated with low scores on stress, anxiety, and depression among all the age groups, gender, marital status, and field of work [14]. These studies show that Emotional Intelligence can have a mediating effect on perceived stress among individuals.

Supporting previous research, though no significance, a negative correlation between Perceived Stress and Task oriented coping style was found and the study simultaneously validated the hypothesis that there will be a positive correlation between Perceived Stress and Emotion-oriented coping among Medical Interns. A study that tried to understand coping responses of emergency physicians and nurses to the 2003 severe acute respiratory syndrome outbreak found that the respondents reported a preference for problem-focused and emotion-focused coping measures [34]. Similarly, another study to understand stress and coping strategies of medical university students during the Covid-19 pandemic outbreak in Poland found that high stress leads to frequent use of emotion-oriented and task-oriented coping styles. In contrast to the expectation, a reason for the no significant relationship between Perceived Stress and Task oriented coping style, would be the uncertainty faced by medical interns during the pandemic. The consequences of Covid-19 involved the given severity and high mortality rates, unpredictability of the future ahead and constant fear of carrying the virus. The impact of the situation brought in a lot of uncertainty during their internship period. Medical graduates, interns and residents also faced confusion, uncertainty, and frustration about their training pathways in the wake of the covid-19 pandemic.

The current study showed a low negative correlation between the third subscale i.e. Avoidance-oriented coping style and Perceived Stress. This invalidated the hypothesis which stated that there will be a positive correlation between Perceived Stress and Avoidance-oriented coping among Medical Interns. The responses derived from the participants in the informal questionnaire, gave insight to these findings. The participants interned continuously for long hours and had less hours of sleep or time for themselves. However, the sense of duty and responsibility, part of doing good towards mankind and passion for their work were some of the factors mentioned that kept them motivated. Most responses signified the importance of the need for better medical facilities and seeking for positive outcomes and providing services under the constraint situation for the individuals in need. These could be the factors attributing to not adopting avoidance coping styles in such challenging times. A recent study on healthcare workers in Hubei, China, during the Covid-19 epidemic, yielded similar results: to reduce stress, the medical staff tended to rely on active coping strategies, such as using security protocols, practicing social isolation measures, and seeking support from family and friends, but they did not indulge in distraction behaviours [35]. Similarly, another study conducted to assess the correlations between emotional intelligence and stress coping strategies of medical residents showed that a positive correlation was observed between emotional intelligence and adaptive stress coping strategies, while a negative correlation was observed between emotional intelligence (problem focused coping style) and maladaptive stress-coping strategies (escape avoidance) [25].

The sudden change from being a medical student to now an Intern and to be a part of frontline workers for a rare pandemic, made it difficult and uncertain for some of the participants. The responsibilities entrusted during the pandemic and the underlying fear could lead to a lot of challenges making it difficult to understand, use, and manage one's own emotions and to use the information to guide one's thinking and actions, hence a reason for the current study findings.

CONCLUSIONS

The study found a significant negative correlation between Emotional Intelligence and Perceived Stress among Medical Interns. This points out how emotional intelligence can play an important role in the way one perceives stress. Perceived stress was found to have no significant correlation with Task oriented coping styles. However, it had a low positive correlation with Emotion-oriented coping and a low negative correlation with Avoidance-oriented coping styles. Further the current study found a moderate positive correlation between Emotional intelligence and the first Task-oriented coping style and a moderate negative correlation between Emotional Intelligence and Avoidance-oriented coping among Medical Interns. However, the study did not find a significant relationship between emotional intelligence and Emotion-oriented coping style.

Findings from the current study suggest several limitations. Because Covid-19 is a rare pandemic in this century and emotional intelligence, stress and coping strategies are more situation dependent, we are not sure whether the study findings are temporary and cannot be generalised. Secondly, the study involves a small sample size collected across the country. A larger sample size could help understand the study more

efficiently, giving a more representative result. Thirdly, the data was collected online, where participation was limited only to people who have access to the internet. It also cannot be clearly affirmed that participants in the study would have filled out the form truthfully. A socially desirable response or random marking may also have given rise to the differentially obtained result.

The current research being a cross sectional study would not cover the long-term understandings, surrounding the relationship between the variables. In this pandemic Interns from all the backgrounds were on covid duty, however the current study could not consider interns of other backgrounds. Despite these limitations, the outcomes of the current study are relevant enough to make a valuable contribution for further research in Emotional Intelligence, Perceived Stress and coping styles. The results of the study found evidence that Emotional Intelligence and Perceived Stress are negatively related and hence managing emotions denotes the ability to regulate emotions in self and others, helping in managing perceived stress. Though prior studies have focused on the relationship between Emotional Intelligence, Perceived Stress and Coping styles, very little is understood about the variables and its effect on medical interns. Further research should be conducted to continue to support the understanding of the relationship of these variables amongst medical interns. The current study was conducted on a small sample size which makes it difficult to generalize to the population. Including a larger sample size would give a better insight on these variables. It would be interesting to also understand the level of the variables i.e. the levels of perceived stress, emotional intelligence, and coping mechanisms, among the criterion population. An intervention study could also be conducted to understand the benefits of providing tools to manage and enhance emotional intelligence and to understand its effects on coping with stress.

REFERENCES

1. Willis KD, Burnett Jr HJ. The Power of Stress: Perceived Stress and Its Relationship with Rumination, Self-Concept Clarity, and Resilience. *North Am J Psychol* 2016;18(3).
2. Mayer JD, Salovey P. Emotional intelligence and the construction and regulation of feelings. *Appl Prev Psychol* 1995;4(3):197-208.
3. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav* 1983;1:385-96.
4. Shapiro DL. Relational identity theory: a systematic approach for transforming the emotional dimension of conflict. *Am Psychol* 2010;65(7):634-55.
5. Lindo JL, McCaw-Binns A, LaGrenade J, Jackson M, Eldermire-Shearer D. Mental well-being of doctors and nurses in two hospitals in Kingston, Jamaica. *West Indian Med J* 2006;55(3):153-9.
6. Tam CW, Pang EP, Lam LC, Chiu HF. Severe acute respiratory syndrome (SARS) in Hong Kong in 2003: stress and psychological impact among frontline healthcare workers. *Psychol Med* 2004;34(7):1197-204.
7. Lee M, Vermillion M. Comparative values of medical school assessments in the prediction of internship performance. *Med Teacher* 2018;40(12):1287-92.
8. Abouammah N, Irfan F, Marwa I, Zakria N and Alfaris E. Stress among Medical Students and Its Consequences on Health: A Qualitative Study. *Biomed Res* 2020;31(1):1-8.
9. Elzubeir MA, Elzubeir KE, Magzoub ME. Stress and coping strategies among Arab medical students: towards a research agenda. *Education Health* 2010;23(1):355-62.
10. Al Sunni A, Latif R. Perceived stress among medical students in preclinical years: A Saudi Arabian perspective. *Saudi J Health Sci* 2014;3(3):155-9.
11. Allen D. The nursing-medical boundary: a negotiated order?. *Sociol Health Illness* 1997;19(4):498-520.
12. Patrick Y, Lee A, Raha O, Pillai K, Gupta S, Sethi S, Mukeshimana F, Gerard L, Moghal MU, Saleh SN, Smith SF. Effects of sleep deprivation on cognitive and physical performance in university students. *Sleep Biol Rhythms* 2017;15:217-25.
13. Swamy M, Bloomfield TC, Thomas RH, Singh H, Searle RF. Role of SimMan in teaching clinical skills to preclinical medical students. *BMC Med Educ* 2013;13(1):1-6.
14. Kousha M, Bagheri HA, Heydarzadeh A. Emotional intelligence and anxiety, stress, and depression in Iranian resident physicians. *J Fam Med Prim Care* 2018;7(2):420-6.
15. Görgens-Ekermans G, Brand T. Emotional intelligence as a moderator in the stress–burnout relationship: a questionnaire study on nurses. *J Clin Nurs* 2012;21(15-16):2275-85.
16. Alanazi AA, Alshaalan ZM. Views of faculty members on the use of e-learning in Saudi medical and health colleges during COVID-19 pandemic. *J Nat Sci Med* 2020;3(4):308-17.
17. Giménez-Espert MD, Prado-Gascó V, Soto-Rubio A. Psychosocial risks, work engagement, and job satisfaction of nurses during COVID-19 pandemic. *Front Pub Health* 2020;8:566896.
18. Bhatt S, Rajesh G, Thakur D. Knowledge, perceived need for education, and willingness to participate in bioterrorism preparedness among students in an Indian dental institute: A questionnaire study. *Med J DY Patil Univ* 2017;10(6):526-31.

19. Leonelli BR, Kuhn T, Hughes JW. Sleep quality and mental health during COVID-19: the role of distress tolerance. *Psychol Health Med* 2023;28(4):929-37.
20. Surrati AM. Medical Staff Teaching Experience During COVID-19 Pandemic. *Majmaah J Health Sci* 2022;10(4):43-8.
21. Çelmeçe N, Menekay M. The effect of stress, anxiety and burnout levels of healthcare professionals caring for COVID-19 patients on their quality of life. *Front Psychol* 2020;11:597624.
22. Gerits L, Derksen JJ, Verbruggen AB, Katzko M. Emotional intelligence profiles of nurses caring for people with severe behaviour problems. *Personal Individ Diff* 2005; 38(1):33-43.
23. Rawat P, Joshi C, Joshi AK, Sayana A, Bisht Y, Joshi S. Involvement of Final year Medical Students in Hospital work during COVID-19 pandemic: A students' perspective.
24. Vagni M, Maiorano T, Giostra V, Pajardi D, Bartone P. Emergency stress, hardiness, coping strategies and burnout in health care and emergency response workers during the COVID-19 pandemic. *Front Psychol* 2022;13:918788.
25. Montvilaitė G, Antinienė D. Emotional Intelligence and Stress Coping Strategies of Medical Residents. *Baltic J Sport Health Sci* 2019;4(115).
26. Nagdive A, Zaman RU, Mansharamani HD, Behere PB, Fernandes R. A Study of Perceived Stress & Coping in Interns in a Tertiary Care Hospital in a North-Eastern State of India. *J Evol Med Dent Sci* 2020;9(52):3950-6.
27. Huang L, Lei W, Xu F, Liu H, Yu L. Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: A comparative study. *PloS One* 2020;15(8):e0237303.
28. Yu NZ, Li ZJ, Chong YM, Xu Y, Fan JP, Yang Y, Teng Y, Zhang YW, Zhang WC, Zhang MZ, Huang JZ. Chinese medical students' interest in COVID-19 pandemic. *World J Virol* 2020;9(3):38-43.
29. Schutte NS, Malouff JM, Hall LE, Haggerty DJ, Cooper JT, Golden CJ, Dornheim L. Development and validation of a measure of emotional intelligence. *Personal Individ Diff* 1998;25(2):167-77.
30. Cohen S, Kamarck T, Mermelstein R. Perceived stress scale. *Measuring stress: A guide for health and social scientists*; 1994.
31. Parker JD, Endler NS. Coping with coping assessment: A critical review. *Eur J Personality* 1992;6(5):321-44.
32. Zhang X, Li X, Liao Z, Zhao M, Zhuang Q. Evaluation of psychological stress in scientific researchers during the 2019–2020 COVID-19 outbreak in China. *Peer J* 2020;8:e9497.
33. Wang C, Wang W, Wu H. Association between medical students' prior experiences and perceptions of formal online education developed in response to COVID-19: a cross-sectional study in China. *BMJ Open* 2020;10(10):e041886.
34. Phua DH, Tang HK, Tham KY. Coping responses of emergency physicians and nurses to the 2003 severe acute respiratory syndrome outbreak. *Acad Emerg Med* 2005;12(4): 322-8.

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