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THE RELATIONSHIP BETWEEN PERCEIVED STRESS AND THINKING STYLES AMONG DOCTORS

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Abstract

Doctors often work in demanding and stressful environments. Continuous stress affects the thinking styles, which may lead to poor decision-making. This study aimed to examine the perceived stress and thinking styles (rational and experiential) among doctors in Pakistan using a quantitative correlational design. A total of 300 medical doctors aged 22 to 30 years were recruited through purposive sampling. Inclusion and exclusion criteria have been followed strictly. The participants were provided with the Perceived Stress Scale (PSS-10), the Rational-Experiential Inventory (REI-40), and a demographic sheet. Data was analysed using SPSS version 26 with Pearson correlation formulae, regression analysis and independent samples t-tests. The results revealed that perceived stress was negatively correlated with rational thinking (r = -.574, p =.001) and positively correlated with experiential thinking (r =.236, p =.001). The regression analysis showed that perceived stress had predicted 33 per cent of the variance in rational thinking and 5.6 per cent in experiential thinking. The stress levels in female doctors were higher, and experiential thinking was also more prominent than in male doctors. The stress levels of doctors in emergency settings were much higher than those in the OPD/ inpatient departments. When perceived stress is high, it lowers analytical decision-making and enhances intuitive processing in medical doctors. Stress levels and thinking styles depend on gender and the work environment. Knowledge of these associations could be useful in educating stress-management programs and contribute to better clinical judgment in the healthcare environment.

INTRODUCTION

Perceived stress refers to the extent to which one perceives certain events in their life as stressful and disturbing, and how it is measured in practical and observable terms. (Cohen, Kamarck, & Mermelstein, 1983). The state or emotion a person experiences when he or she believes that a task or a group of tasks are beyond the personal and social resources the individual can unleash to meet them is referred to as stress (Marksberry, 2016).

In the United States, it has been noted that about half of doctors experience elevated rates of stress and burnout, which they attribute to the long working hours, poor sleep and emotional fatigue. (Shanafelt et al., 2012). If we refer to the United Kingdom, more than one-third of doctors have a high perceived level of stress (Sharma, Sharp, Walker, & Monson, 2008). In the meantime, 1/3 of physicians in Pakistan were under high-risk stress, and 25% of physicians had already experienced it. (Hussain et al., 2022).

According to the American Psychiatric Association (2024), the majority of Americans report moderate to severe stress, demonstrating how common stress is. Stressful events cause

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biological, emotional, and cognitive reactions known as stress responses. Sometimes a person's reaction to the stressor is more important than their exposure to it (Crosswell & Lockwood, 2020).

Most citizens are served by the public hospitals, it is commonly overcrowded, under-resourced, and there is always a shortage of medical personnel. Physicians in these environments encounter massive patient influx, scanty diagnostic services and administrative burdens- a combination that compounds their stress levels in relation to work. It has been found that this type of job stress has a harmful influence on the performance of the doctor in the state-owned hospitals, including Peshawar hospitals (Ullah et al., 2017).

Thinking styles are defined as the habitual modes through which people process information, arrive at decisions and solve problems. Rational thinking style is logical and critical. It entails a very cautious thinking that is founded on facts, evidence and conscious thought. Rational thinkers are more likely to assess the information systematically, consider the advantages and disadvantages and make decisions only after critical thinking. Experiential thinking style is automatic, emotional, and intuitive. It is based on anecdotes, the impressions of the gut and an instant impression instead of critical thinking. This style is fast and easy, and it derives its experience from past experiences and emotional indicators to make decisions. (Epstein, 1994).

The Cognitive-Experiential Self-Theory (CEST) offers an underlying approach to information processing in the form of two systems: the rational system, in which information is processed in an analytical, deliberate, and logical way; and the experiential system, where information processing is fast, intuitively oriented, and emotion-related (Epstein, 1994).

This dual processing theory describes how people can use various thinking styles in interpreting and reacting to stressful experiences. An almost similar viewpoint is provided by a dual-process theory developed by Kahneman, which differentiates between System 1 and System 2 thinking. System 1 is automatic, fast and in most cases unconscious, whereas System 2 is slower, laborious and in need of conscious thought control (Kahneman, 2011).

The effects of stress on cognitive functioning are also described with the help of the Attentional Control Theory (ACT), according to which anxiety and stress lead to the impairment of attentional control by making it less efficient in goal-directed attention and more vulnerable to distraction. The perception of stress can consequently disrupt the attentional control, resulting in failures in concentration and a decline in cognitive effectiveness when carrying out clinical duties (Eysenck, 2007).

In the same manner, Cognitive Load Theory (CLT) stresses on the capacity limitation of the human working memory. Experts perceive stress on high levels may serve as the second cognitive load, consuming more resources of working memory and compelling individuals to use more intuitive and experiential processing instead of logical and analytical processing (Paas, Renkl, & Sweller, 2003)

The connection between stress and performance is also elucidated by the Yerkes-Dodson Law, which forms a curvilinear relationship between arousal and performance. Although some stress levels are beneficial because they help individuals to be alert and make rational decisions, high levels of stress might affect cognitive performance and lead to a decrease in the quality of decisions made (Yerkes & Dodson, 1908). These theoretical assumptions can be empirically supported by showing that a high perceived stress impairs rational decision-making ability and involves more reliance on experiential thinking, especially in high-stakes clinical settings where fast judgments need to be made (Yu, 2016).

This research addresses the gap that is specific to the profession by studying doctors directly. Besides, it observes the relationship between the perceived stress (IV) and styles of thought (DV) as a novel fact to be included in stress management plans and psychological interventions in healthcare. The study of demographic variation (e.g. age, gender, speciality) also helps in gaining insight into the diversity of stress among physicians. Therefore, this study not only deals with gender differences in thought processes but also is very clinical. It will fill a substantial gap in the

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existing literature and will provide practical relevance to mental health.

This research aims to explore the connection between perceived stress and thinking styles (rational and experiential) in medical doctors. The results of this study can be used in stress management techniques, cognitive therapies, and better clinical decision-making, which will help in improving patient care.

LITERATURE REVIEW

Bavolar and Orosova (2015) discovered that perceived stress has an adverse correlation with the use of intuition in decision-making, whereas Lasikiewicz (2015) identified that perceived stress has a negative association with rational thought.

Under stress, physicians were less inclined to make conscious assessments of the decision strategies, which heightened the utilisation of the intuitive judgment. Overreliance during stressful situations may decrease flexibility in new or complex situations (Colletti, Flottemesch, O'Connell, Ankel, Asplin, & Hall, 2016). The interpretation of how physicians think when under stress is very important in terms of enhancing patient safety and clinical outcomes (Croskerry, Singhal, & Mamede, 2017).

One experiment revealed that habitual decision-making under stressful situations causes mental fatigue, which causes one to default or make decisions based on intuition instead of critical decision-making. This phenomenon implies that the presence of perceived stress over a long period of time can not only affect the choice of the style of thinking but can also undermine the ability to make rational decisions over time (Danziger, Levav, & Avnaim-Pesso, 2011). Neurocognitively, an increase in stress levels leads to limbic reactions (so-called amygdala hijack), impairing the work of the prefrontal cortex and preventing rational and analytical decision-making (Hamilton, 2015).

Research of emergency physicians and other frontline clinicians reveals that both styles, rational and experiential, are practised. When under acute stress or sleep deprivation, there is an increase in experiential processing and a decrease in the reasoning that requires analytic and working memory; in other words, the effect is directly proportional to long-hour working physicians (Aldamiri, Alhusain, Almoamary, et al., 2018)

Bavolar (2017) also emphasised that rational thinking corresponded with reduced stress and higher life satisfaction in men, while experience-based thinking in women, and those who could flexibly use both thinking styles were the least stressed. The study conducted by Paul (2023) revealed that men and women did not show a significant difference in levels of stress; thus, the connection between thought patterns and perceived stress was a situational matter. Women are more emotion-oriented due to socialisation associated with empathy, while men are more rational-oriented (Coskun, 2018; Warrier, 2018). Female emergency physicians had slightly higher experiential scores than their male colleagues, highlighting some variation within the speciality (Calder et al., 2012).

Speciality and training affected the preferences in thinking styles in medical practice, where senior physicians prefer to think rationally, whereas nurses and managers tend to prefer experiential processing (Sinclair and Hamill, 2010). Saudi emergency physicians tended to employ rational decision making, and experiential decision making was common to some non-consultants (Aldamiri et al., 2018). A study examined the different thinking style preferences by comparing Traditional Chinese Medicine (TCM) and Western Medicine (WM) doctors. It found that TCM doctors preferred legislative and liberal styles, while WM doctors leaned toward structured, rule-based styles such as executive and judicial styles (Zhu et al., 2024).

Additional clinical findings indicate that the perceived stress directly correlates with decision-making preferences among medical professionals: the more stress, the lower the mindfulness, and emotional self-regulation, which affected the decision-making style preference (Vivian et al., 2019).

As it has been shown, the higher the rational thinking preference, the more significant the guideline-concordant clinical practice, and the lower the experiential preference, the lower the standardised protocols adherence, and the clinical importance of thinking styles in

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medical decision-making is obvious (Sladek et al., 2008).

Most of the articles have examined stress as pertaining to burnout, coping mechanisms, or life satisfaction without determining their immediate impact on rationality and experiential thinking. There is very little recent research, and there is limited representation of gender-based analyses in clinical populations, especially in Pakistan.

SUBJECTS AND METHODS

Participants

This cross-sectional study collected data from licensed medical doctors who are already working in clinical settings (medical and surgical emergency, general practice, inpatient wards and outpatient departments) in government and private hospitals in Faisalabad. The study duration was four months after the approval of the ethical review committee. A total of 300 doctors were recruited through a purposive sampling technique.

Inclusion criteria were certified male and female medical physicians, aged 22 to 30 years, actively practising in medical institutions across various designations, including house officers, medical officers, and postgraduate trainees. Physicians who were not actively practising or on medical leave for more than three months, those with psychiatric conditions such as schizophrenia or bipolar disorder, medical or PhD students, non-MBBS healthcare workers (e.g., DPT, Pharm-D, BDS, nursing, MLT etc), and doctors with a recent history of personal or professional trauma affecting cognitive function were excluded.

Instruments

For perceived stress and thinking styles, the following instruments have been used:

Perceived Stress Scale (PSS-10)

The Perceived Stress Scale (PSS-10) was developed by Sheldon Cohen, jointly with Tom Kamarck and Robin Mermelstein, in 1983 to assess how people perceive stress. A total of 10 items measured how frequently study participants encountered thoughts and feelings linked to stress during their last month. The tool operated through a 5-point Likert scale that extended from 0 (Never) to 4 (Very Often). Some common interpretation levels include the following: low levels of stress are reflected in the range of 0-13, moderate levels are in the range 14-26, and high levels fall in the range 27-40. The Psychometric properties of the PSS-10 have proven consistently strong because Cronbach's alpha values reached between 0.74 and 0.91. The stress indicator showed robust validity assessments through evidence showing its link to depression, as well as anxiety assessments, and additional stressors (Cohen, Kamarck, & Mermelstein, 1983).

Rational-Experiential Inventory (REI)

In 1996, Scott Epstein and his colleagues created the Rational-Experiential Inventory (REI) to evaluate human thinking style variations based on Cognitive-Experiential Self-Theory (CEST). The Rational-Experiential Inventory used two primary scales that evaluate thinking between rational, logical, analytical forms and experiential choices of intuition and emotional sets. The popular version of the REI consisted of 40 questions distributed between the experiential and rational sections. The instrument exhibited a five-point Likert scale that operated between 1 (Definitely not true of myself) and 5 (Definitely true of myself). The instrument proved effective with high psychometric qualities through Cronbach's alpha values that exceeded 0.80 on both subscales. The REI instrument demonstrated effective construct and discriminant validity because it properly separated participants based on their rational and experiential thinking preferences (Pacini & Epstein, 1999).

Procedure

After approval from the Ethical Review Committee of Faisalabad Medical University, the data were collected from doctors in both emergencies (medical and surgical) and non-emergency (OPD, inpatient wards) settings of Government and Private hospitals. The inclusion and exclusion criteria were strictly followed.

Doctors were approached individually and told about the purpose of the study, confidentiality of the study, voluntary participation and their right to withdraw at any point. Individuals who agreed signed an informed consent and filled two self-report questionnaires, Perceived Stress

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Scale (PSS-10) and Rational-Experiential Inventory (REI-40), and a demographic sheet in a quiet place, which took around 15 to 20 minutes. The researcher was also present to respond to questions for clarification, and the data was collected over a period of four months until the target sample size was achieved.

All the collected data were entered into and analysed with the help of the Statistical Package for Social Sciences (SPSS) version 26.

RESULTS

A total of 300 doctors were enrolled in this study. All the demographic variables were computed into frequencies and percentages, and correlation analysis was used to test the relationship between perceived stress and thinking styles. An independent samples t-test was used to see the differences between the groups of different genders and emergency and non-emergency working environments.

Table 1 Descriptive Statistics of the Participants (N=300)

Characteristics	Categories		M	SD
Age	Minimum	22	25.63	1.893
	Maximum	30		
			f	%
Gender	Male		191	63.7
	Female		109	36.3
Marital Status	Single		237	79
	Married		62	20.7
	Divorced		1	0.3
	Widowed		0	0
	Separated		0	0
Designation	House Officer		183	61
	Medical officer		57	19
	Postgraduate Resident		56	18.7
	Senior Registrar		2	0.7
	Consultant / Specialist		2	0.7
Years of Experience	0 to 2		240	80
	Above 2 to 5		51	17
	Above 5 to 8		9	3
Work Setting	Surgical Emergency		71	23.7
	Medical Emergency		58	19.3
	Operation Theatre		37	12.3
	OPD		73	24.3
	Inpatient Department		61	20.3
Type Of Hospital	Public Sector		231	77
	Private Sector		45	15
	Both		24	8
Average Working Hours per week	0 to 30		26	8.7
	Above 30 to 60		181	60.3
	60 above		93	31
Diagnosed Mental Health Condition	No		300	100
	Yes		0	0

Note. M= Mean, SD = Standard Deviation, f= frequency, % = percentage

The sample comprised predominantly young doctors (M = 25.63 years), of the age group between 22 to 30 years. The bulk of the participants were male (63.7%), single (79%), and house officers (61%). Most of them (80% of them) had 0- 2 years of experience and were working in OPD, surgical or medical emergency settings. Most of the respondents worked in the public-sector hospitals (77%), with an average of 30-60 hours being their main working hours (60.3%). None of the participants had any diagnosed mental health condition.

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Table 2 Pearson Correlations between Perceived Stress and Rational thinking and Experiential thinking (N=300)

Variable		1	2	3
1.	Perceived Stress	_		
2.	Rational Thinking	-.574**	_	
3.	Experiential Thinking	.236**	-.343**	_

Note. Perceived Stress, Rational Thinking, Experiential Thinking. P< .05

Table 2 indicates that total perceived stress had a negative and significant relationship with rational thinking (r = -.574, p <.001), and a positive and significant relationship with experiential thinking (r = -.236, p <.001), but rational and experiential thinking had a positive and slightly significant relationship (r =.343 and p <.001).

Table 3 Linear Regression of Rational Thinking (N=300)

Outcome Domain	B	SE	β	t	p	95% Cl for B	
						LB	UB
Constant	90.15	2.17	__	41.41	.00	85.87	94.44
Rational Thinking	-1.22	.10	-.57	-12.10	.00	-1.41	-1.02

Note. R^2 =.33; Predictor = Perceived stress; Outcomes = Rational Thinking, p <.05

Table 3 revealed, in the regression analysis, that perceived stress was indeed a significant negative predictor of rational thinking in doctors. In particular, the stronger the perceived stress, the weaker the rational thinking (B = -1.22, SE = 0.10, β = -0.57, t = -12.10, p = 0.00). The model also accounted for 33 per cent (R^2 =.33) of the variance in rational thinking, which is regarded as high when it comes to behavioural research. This meant that the more the doctors were stressed, the less they could use logical, systematic and analytical thinking processes to their advantage.

Table 4 Linear Regression of Experiential Thinking (N=300)

Outcome Domain	B	SE	β	t	p	95% Cl for B	
						LB	UB
Constant	54.70	2.31	__	23.67	.00	50.15	59.25
Experiential Thinking	.44	.10	.23	4.18	.00	.23	.65

Note. R^2= .056; Predictor = Perceived stress; Outcomes = Experiential Thinking

As demonstrated in Table 4, the regression analysis indicated that the perceived stress was a positive predictor of experiential thinking among doctors. More perceived stress was related to more dependence on experiential thinking (B = 0.44, SE = 0.10, β = 0.23, t = 4.18, p < 0.001). The model achieved a small but significant effect, which explained the 5.6% variance (R 2 =.056) of experience thinking. This observation indicates that physicians under greater stress levels tend to resort to intuition, gut feelings and emotionally based judgments as opposed to rational thought. This pressure drive towards experiential processing can be an adaptation to something, which enables more rapid penetration of judgment in high-need contexts, but may also lead to the risk of subjective or emotionally biased judgments.

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Table 5 Independent Sample T-Test for Gender Differences among Doctors under Stress (N=300)

Variables	Male N=191		Female N=109		t	p	95% of Cl		
	M	SD	M	SD			LL	UL	Cohen's d
Perceived Stress	18.74	5.93	23.63	6.87	-6.47	0.00	-6.37	-3.40	.75
Rational Thinking	69.56	11.03	57.32	15.88	7.83	0.00	9.16	15.31	1.56
Experiential Thinking	60.72	11.80	69.46	12.49	-6.04	0.00	-11.59	-5.89	1.44

Note. M = Mean; SD = Standard Deviation; t = t-value; p = significance level; CI = Confidence

Table 5 shows that there were significant gender differences in all the variables. There was an increased perceived stress among the females as compared to the males ($p < .001$, large effect). Males were much more rational in their thinking and females were more experiential ($p < .001$ on both of them, very large effects).

Table 6 Independent Samples t-Test for Differences in Perceived Stress and Thinking Styles Among Doctors Working in Emergency and OPD/Inpatient Settings (N=300)

Variables	Emergency (n = 129)		OPD/Inpatient (n = 171)		t	p	95% of CI		
	M	SD	M	SD			LL	UL	Cohen's d
Perceived Stress	22.17	6.93	19.27	6.27	3.78	.00	1.39	4.40	0.44
Rational Thinking	63.19	15.21	66.57	13.36	–2.04	.04	–6.64	–0.13	0.24
Experiential Thinking	62.76	13.60	64.76	12.05	–1.35	.17	–4.92	0.92	0.16

Note. M = Mean; SD = Standard Deviation; t = t-value; p = significance level; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; d = Cohen's d (effect size)

Table 6 indicates that the perceived stress among doctors in emergency settings was found to be significantly higher than in OPD/inpatient departments, and the effect size was small to moderate. Emergency doctors thought less rationally, whereas experiential thinking had no significant difference among groups.

DISCUSSION

The sample data collection consisted of doctors in diverse departments, such as emergencies, OPD and wards doing different working hours and representing different gender groups, with different age groups. These findings not only enrich our knowledge concerning the cognitive-emotional processes of doctors but also lead to the creation of specific interventions, which can be used to facilitate the adoption of less dysfunctional coping and more balanced decision-making in stressful situations. The fact that the current results align with the results presented previously can be attributed to a number of common psychological and contextual factors (Bavolar & Orosova, 2015).

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The individuals involved in the Bavolar and Orosova study were young adults whose level of emotion regulation and executive functioning remains underdeveloped; therefore, both groups are more susceptible to the cognitive impact of stress. Deliberate thinking is curtailed by time pressure, resulting in shortcuts that are intuitive or judgments that are influenced by emotions. The similarity in the results was motivated by the fact that both studies had participants who had cognitively demanding and high-pressure jobs. The students had to work with complicated academic and belief-based problems, whereas the doctors in the current research had to make a quick clinical judgment under pressure. Uncertainty and the pressure to perform in both cases augmented cognitive load, which constrained their rational analysis and encouraged intuitive, experience-based thoughts. Therefore, the demand for similar tasks in cases of stress is what accounts for the regularity of impaired rationality and increased dependency on intuitive processing (Lasikiewicz, 2015).

The participants of both studies were under intensive stress, academic stress among the students and professional stress among the doctors and this strained their working memory and executive control, hence depending on the intuitive and emotional processing. Such a tendency can be explained by the dual-process theory, according to which, in case the rational (System 2) processes are overworked, intuitive (System 1) thinking prevails (Evans & Stanovich, 2013).

The findings of the current report indicated that perceived stress was a significant negative predictor of rational thinking in doctors, which accounted for 33 per cent of the variability. This is an indication that the longer the doctors are exposed to stress, the less they can think logically, analytically and systematically. Stress seems to disrupt executive functioning, resulting in lower cognitive control and accuracy of decision-making. These are on the performance of health professionals. The review established that high stress levels might adversely affect divided attention, working memory and decision making. Stress, beyond an ideal level, interferes with cognitive functioning and leads to a decline in performance, especially in complicated tasks that require critical thinking and problem-solving. This is a direct indication of the findings of the current study in that stress hinders the functioning of rational or analytical thought process in the doctor community, who are usually subjected to a high cognitive burden at work (LeBlanc, 2009).

In addition, the same results were obtained in other studies conducted in other countries that revealed that stress was negatively correlated to job performance and cognitive functioning, especially in the fields of employment where one needed continuous attention and reasoning. There were found to be high levels of stress that prevented efficient decision-making, problem-solving, and processing complex information. These influences were more evident in jobs that required high mental work or had strict deadlines, indicating the pressing influence of stress on productivity at work (LePine, Podsakoff, & LePine, 2005)

The current results, as well as most of the previous research studies, show that stress impairs the rational thought process; however, there is also a more subtle point of view in certain studies. Indicatively, Driskell and Salas (1996) observed that moderate stress can, in fact, result in increased alertness and focus on the task to perform better on well-repeated or standard decisions. This is because moderate stress levels will raise the level of physiological arousal and attention, which may boost performance on familiar or automatic tasks. In these circumstances, stress hormones such as adrenaline make people alert and faster in their reactions, besides being able to concentrate more. Nevertheless, at extreme or extended levels, stress dominates working memory and cognitive control, thus resulting in worse rational decision-making. In this way, moderate stress may be energising and performance-enhancing, whereas excessive stress will be debilitating and impair cognition (Driskell & Salas, 1996).

The findings meant that perceived stress was a strong positive predictor of experiential thinking. It implies that under the condition of increased stress, doctors use more intuitive and emotion-based information processing methods. They might also do things on impulse or emotional signals that they respond to when pressure is high, more than rationality. People

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who experience greater levels of emotional reactivity or stress resort more to experiential lines of thinking since they are also quicker and less cognitively demanding. This change to intuition could be beneficial in stressful medical practices, in allowing doctors to make quick judgments when required in an emergency, but the long-term effects of using experiential thinking would lead to inaccurate and inconsistent clinical judgments (Jokić, 2019).

The results of the current research unveiled that there is a large difference between genders in the perceived stress and styles of thinking among physicians. There was also a higher perceived stress in female doctors than male doctors, which implies that female medical professionals are more emotionally strained and under the pressure of work. This disparity might be explained by such factors as the multiple role duties, social expectations, and emotional character of caregiving professions. Warrier, Toro, Chakrabarti, Børglum, and Grove (2018) described that women should be more attentive to their emotions and empathetic, as it is socially conditioned, and this can make them more susceptible to stress gender-based social norms would influence men to disallow expression of emotions and women to be more emotionally receptive and thus female physicians are more susceptible to stress in the stressful healthcare settings (Pollack & Levant, 1998).

Moreover, the difference in genders was also presented in the styles of thinking. The male doctors had much higher scores on rational thinking compared with females, as they had more dependable reliance on logical, systematic and analytical thinking. Conversely, female physicians had much greater levels of experiential thinking than males, implying that they are more inclined to use intuition and make decisions based on emotions. women tend to get a higher score in experiential thinking scales, perhaps because of social and emotional learning experiences that facilitate intuition and empathy (Coşkun, 2018).

In the same way, it was reported that the stress levels of college women were generally higher than those of men (Brougham et al., 2009). Female doctors in Pakistan are prone to stress as they are exposed to high workplace demands and social pressure, thus making our findings a big gender difference. Schmaus, Laubmei, Boquiren, Herze, and Zakowski (2008) investigated gender differences in controlled conditions and concluded that women are more exposed to recurrent stress than men. Conversely, no gender differences have been reported, which can be attributed to the fact that their Ivy League students were generally more highly educated and had greater socioeconomic status and, thus, could have more support and coping resources (Leong, Bonz, & Zachar, 1997).

The observation that male physicians in the current research exhibited more reliance on rational/analytical thinking is consistent with the existing literature. Sladek et al. (2008) noted that men tend to follow rational thinking as opposed to women, who follow experiential processes. The difference between the genders in the sample of doctors can be justified by reference to this initial piece of work. On the other hand, the findings that indicate that female doctors performed better in experienced thinking, intuition, quick gut-feelings, and emotionally inspired decision-making are also well backed by the literature. The same was also observed where greater scores of experiential thinking in women at the university were found (Coşkun, 2018)

These trends do indicate that female physicians might be more inclined towards incorporating relational, emotional, and intuitively based cues in their clinical reasoning, possibly because of the existence of socialised gender roles that place an emphasis on sensitivity and communication, and on the relational aspect of the clinical work. In a Pakistani sample, females were reported to be more likely to experience experiential thinking than males (Rafique, Habib, Rehman, & Arshi, 2020)

The current research has determined that Emergency Medicine (EM) physicians are subjected to a significantly high degree of situational stress, which could be mainly attributed to the fact that their environment is acute and unpredictable. The stressful environment of the emergency department is characterised by the need to make decisions quickly, to respond to life-threatening cases immediately, and to serve multiple patients,

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which are all major stress-inducing factors. This result aligns with the prior studies, which reported that EM doctors have distinct issues in comparison to other types of medical specializations such as contact with critical incidents, time-related decision-making obligations, and potential inability to control patient traffic. However, despite these stressful situational factors, general stress, anxiety, and depression ratings proved to be similar to those of Internal Medicine physicians, indicating that there might be no significant stress differences due to occupation when it comes to different specialities (Ansari et al., 2015).

The current research highlights that physicians operating in different fields are under a lot of stress that is caused by both environmental and work-related factors. Although some work settings, like emergency medicine, might be more acutely stressful, chronic work-related stress impacts all medical professions in general well-being and performance. These results support the necessity of such stress-reduction measures, the need to support the mental health of the target audience, and the need to make healthcare professionals resilient. Nonetheless, under more specific terms, when dealing with work-related or occupational stress, the doctors of the Emergency Department have reported a greater number of moderate stress and severe stress. These levels are mostly affected by the work hours, shift schedule and the stressful duties of the patient care in high-stakes environments. These high stress levels can directly affect the mental and physical health of doctors, as well as potentially cause more mistakes, job dissatisfaction, and burnout, which is why specific interventions aimed at promoting the mental health of EM professionals can be considered (Aciksari & Karatepe, 2020).

CONCLUSION

These findings indicate that perceived stress has a pronounced effect on the cognitive styles of doctors; the high perceived stress level has a close relationship with the less rational and analytical, and a weak connection with the more experiential or intuitive cognitive style. This is an indication that stress has little or no effect on improving intuition but on worsening analytic capacity, and hence the physicians who are stressed may not be keen to make deliberate and evidence-based decisions, but to fall back on using heuristics or pattern recognition. There were also gender differences; women doctors expressed more stress as well as experiential thinking, whereas male doctors expressed a higher rational thinking.

The study has a diverse sample and gives a good understanding of how perceived stress is associated with thinking styles among medical doctors that involve both rational and experiential processing, and it considers gender and workplace differences, giving useful implications for the training, policy, and clinical practice.The self-reported measures and purposive sampling restrict causal inference and extrapolation because the sample consisted of young doctors working in the public sector. The confounding factors (e.g. personality, sleep) could not be measured and controlled.

Overall, the results are consistent with Cognitive-Experiential Self-Theory, showing how stress alters the balance in favour of the reduction of analytical processing, which may indicate the significance of stress-reduction techniques to defend clinical judgments and patient outcomes. . The training interventions should be premised on simulation of stressful scenarios, bias recognition training, and decision aids training. Future studies need to employ longitudinal designs, physiological and real-time measurement, intervention testing and modulator investigation, such as resilience and coping style.

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