
IMPACT OF EMOTIONAL INTELLIGENCE ON THE RESEARCH STRESS: A STUDY OF GENDER DIFFERENCES

Zain ul abdin Rind

Lecturer,

Department of Education, University of Sufism and Modern Sciences Bhitshah,
Sindh, Pakistan.Email: zainulabdin@usms.edu.pk**Amjad Ali Arain**

Professor,

Department of Education, Government College University, Hyderabad,,
Sindh, Pakistan.Email: amjad.arain@yahoo.com**Javeria Memon**

Lecturer,

Department of Education, University of Sufism and Modern Sciences Bhitshah,
Sindh, Pakistan.Email: javeriamemon68@gmail.com

ABSTRACT

The study aimed to determine how EI affected both male and female research students' levels of research stress. Public universities located at Karachi and Jamshoro recognized by HEC were population of the study. The Current study was purely descriptive. In this study quantitative approach was used. Research scholars' responses were collected through a Survey technique. The study's participants were research scholars from public and private universities. Sample size was comprised of 300 (160 male & 140 female) research students and through the use of random sampling technique, data was gathered. Two research tools EI and research stress were used to collect the data from research students. The mean emotional intelligence score for both male and female students was 2.30, indicating low emotional intelligence. The research stress mean score was ($M= 3.60$) which shows the high level of research stress among male and female. The emotional intelligence scores of male and female scored differed significantly ($t= -5.000$, $p= <.001$). Additionally, there were significant differences between male and male respondents' levels of research stress ($t= 8.990$, $p=.001$). Emotional Intelligence and Research Stress were found to have a similar negative effect (-0.784 , $p= 0.01$) in both male and female students. Since

lower EI levels are associated with higher stress, we should work to help students increase their emotional intelligence to reduce their stress towards research.

KEYWORDS

Emotion, Intelligence, Research, Stress

INTRODUCTION

Students experience various emotions while learning in tertiary education, including joy and interest in the subject matter, anxiety, rage, stress, and boredom. Success in the modern world depends on one's ability to perceive others' emotions and respond appropriately. According to Mayer & Salovey, Schutte, & Bhullar (1990; 2009), the capacity to control, manage, and express one's emotions is known as EI including the capability to regulate and manage emotions. EI has four key characteristics and is ability rather than just a trait (Whitbourne, 2021).

The Pakistani people have long struggled with emotional issues. To handle any challenges in life, Pakistanis must undergo emotional training (Muteeb, 2020). The idea of emotional intelligence (EI) has evolved over the last 20 years as a component of personal talent. Its advancement can address management, health, and education issues in addition to many theoretical and psychological issues. Experts and the general public know that an individual's understanding, abilities, capacity for making connections, etc., are more important than just his level of intelligence. even though there are numerous research studies on EI and numerous ways and methods of measuring it (Krulc, 2017). New concepts have emerged that we can use to evaluate specific individuals EI.

It is generally accepted that students must work hard to achieve a higher level of education. This expectation causes stress and anxiety in the students, which hinders their ability to perform effectively in their academic careers. In the first year of their academic program, their stress level is higher. The majority of students leave their courses during the first year. The high stress and anxiety among the students are thought to be the primary cause of this type of dropout. According to research, the first year of stress and how students handle it are not indicators of how well they will perform in their final year. During the course, he might need to remember to care for himself and his studies while picking up useful knowledge.

Both male and female students must organize and plan their academic work. They are going to be in charge of the reading and research. Direction and deadlines will be provided to ensure they are moving in the right direction, but they must set their objectives and constraints. They should learn and be able to use critical analysis, induction and deduction, and logical reasoning at the postgraduate level. Both male

and female scholars are expected to advance their knowledge at this level. The mindset needed to pursue a graduate degree is very different. Many students can't be bothered at the undergraduate level because they have to go to class and lectures and think that going to college is only for social life. Everyone who is a graduate student attends lectures with enthusiasm, avoids rumours, and organizes academic discussions.

Parenting a student is a dual responsibility. As a result, it demands dedication and time. Stress can be caused by handling heavy workloads, staying up late studying and writing, moving to a new city, and being away from loved ones. Stress results when the demand exceeds the capacity to handle it. Stress develops when a person's financial obligations outweigh his resources. Long-term high-stress levels will negatively impact academic and research performance, student's capacity to contribute, and other types which disturb behaviours (Busari, A. O., 2012).

To finish their postgraduate degrees, research students must learn how to effectively manage their stress. The majority of bright students who can succeed in higher education need help with various skills like forming supportive relationships, controlling their stress, and making well-informed decisions. They might develop unhealthy coping mechanisms, undermining their academic and research endeavours. A lack of EI can be used to describe each of these problems. Understanding emotions and how we react to them will help with stress management. The issue of stress and personal behaviour is currently one of society's social crises. These issues can be effectively resolved with emotional intelligence, which also enables people to adjust to social situations. Emotional intelligence has attracted much attention from businesses, universities, and educational institutions lately. Emotional intelligence inspires researchers and curriculum developers to enhance educational curricula. EI development has long-term effects on a person. The growing conflicts among schoolchildren have many parents and educators in shock. They are eager to impart to students the necessary EI skills. According to Agolla & Ongori (2009), the education sector was once considered one of the least stressful. Still, due to intense competition, it is now the most stressful one. College and university students in the education sector experience stress in various forms. Course load is one factor in stress, claim Talib and Zai-ur-Rehman (2012). The highest academic degree is a doctorate (PhD), an honorific and revered title. As a result, doctoral students, who comprise the research sector's core, have earned the social right to use the title "Doctor." In contrast, they can typically earn more money, and those without doctorates always look up to and envy them. To overcome the obstacles of graduate school, doctoral students must put in a lot of effort, sacrifice, blood, sweat, and tears throughout the research process. According to (Reddy & Karishmarajanmenon, 2018), Nowadays, stress is understood to be a lifestyle crisis that can impact anyone, regardless of their developmental stage. According to a recent report by Evans et al. (2018), In comparison to the general

population, doctoral students experience depression and anxiety at a rate that is six times higher. Mackie & Bates (2019) found that issues with supervisor relationships, lack of university transparency, workload, and financial insecurity are stress factors that affect Ph.D. students.

LITERATURE REVIEW

Some authors assert that intelligence has come to be seen in recent decades as a component of general intelligence that still needs to be developed. Therefore, new theories promote a broader perspective of intelligence, which transcends pure rationality and includes emotional factors (Alam, 2021). Stressful events and psychological challenges characterize young people. Because depression is associated with the failure fear, the inability to focus, and the negative assessment of the future, it has also been observed in adolescents (Busari, 2012).

Stress develops when a person's financial obligations outweigh his available resources. Numerous studies conducted worldwide have raised severe concerns about stress in tertiary education. Men sometimes displayed more stress than women in studies. Women, however, experience more stress in interpersonal communication than men (Saxena, 2014). Research stress is the term commonly used to describe the stress the academic environment brings. Teh (2015) conducted a study in Malaysia that found that stress is common among undergraduates. They discovered that students' stress is caused by having to study a large amount of material quickly and worrying about failing exams. Additionally, the amount of homework, exams, and lectures positively correlates with academic stress (Ng, 2016). Stress develops when a student responds to a circumstance they perceive as uncontrollable and irresistible. A stressful situation affects one's biochemistry, physiology, cognition, and behaviour. When a person tries to control or deal with stressors, these changes take place. We think that stress is a necessary part of life and that everyone benefits from it because we become drowsy and laid-back beings without it (Jassal, 2021). EI and Stress have a significant positive relationship (Habib, 2015). The Bryant (2015) study found that students with higher EI scores have lower stress levels. According to Miri (2016), emotional intelligence can help different people succeed. Suleman (2019) stated that the academic success rate increases with the EI level. EI strongly correlates with high academic success and can be used to predict students' academic success. According to Moghal (2016), medical students' skilful use of emotions can reduce Stress. Students differ in emotional intelligence and stress (Rehana, 2016). While female university students experience more stress, male students have higher emotional intelligence (EI) levels. Public university students score higher on EI tests than students who participate in private universities do on stress tests. It is recommended that teachers employ appropriate strategies to address students' stress levels and impart to them the coping

mechanisms necessary to do so. Additionally, it is advised that university students take courses to improve their emotional intelligence and stress management abilities.

RESEARCH OBJECTIVES

1. To measure the EI of research scholars.
2. To evaluate the stress of research scholars.
3. To find out the impact of EI on stress towards research.

RESEARCH QUESTIONS

1. There is no significant difference in the emotional intelligence of male and female students.
2. There is no significant difference in the stress of the male and female scholars.
3. There is negative effect of EI on Research Stress of male and female scholars

RESEARCH METHODOLOGY

The nature of the current study is descriptive. In this study, the quantitative research methodology was used. The data was gathered using a survey technique from academics at public and private universities.

Population

The study population comprises male and female research students from public and private universities of Jamshoro and Karachi. Collecting data from the entire population was impossible due to time constraints. Data were gathered from one public university and one private university. Data was gathered from researcher scholars who have signed up for the study and are actively engaged.

Sampling

For this study, a random sampling method was employed. Three hundred research scholars from Sindh province's public and private universities made up the sample, with 160 men and 140 women.

Research Instrument

The emotional intelligence and stress associated with students' academic work were assessed using a five-point Likert scale. The participants' general EI was assessed using Schutte's Emotional Intelligence scale. Participants' research stress was assessed with 5 factors called the "Research Stress Scale."

DATA ANALYSIS

The data were analyzed with SPSS software. Twenty-eight questions were used to

gauge EI using the tool. Thirty-five questions were used to gauge research stress. The responses to these questions ranged from "1-Strongly Disagree to 5-Strongly Agree" on a 5-point Likert scale. The outcomes are as follows:

Table 1: Variables Emotional Intelligence

	N	Mean	Std. Deviation
Emotional perception	300	2.27	.452
Managing own emotions	300	2.39	.466
Managing others emotions	300	2.77	.581
Emotional utilization	300	2.60	.702
Overall EI	300	2.30	.337

The mean and standard deviation of the four emotional intelligence components are shown in the above table. The factor "perception of emotions" had a mean score of (M= 2.27) and (SD=.452). 'Managing own emotions' had a mean of 2.39 and SD=.466, respectively. 'Managing Others' Emotions' had a mean of 2.77 and SD =.581. The SD was (.702), and the mean for the "utilization of emotions" factor was 2.60. Finally, the overall mean score for "Emotional Intelligence" was (M= 2.30), and SD was (.337), indicating that both male and female research students had low levels of emotional intelligence.

Table 2: Variables of Research Stress

	N	Mean	Std. Deviation
Stress of course work	300	3.65	.671
Stress of Thesis writing	300	3.72	.537
Stress towards supervisor relationship	300	3.13	.766
Academic stress	300	3.69	.684
Socio economic stress	300	3.57	.579
Total	300	3.52	.412

The mean score and standard deviation for the five elements of research stress are shown in the above table. Coursework stress had an average score of 3.65 and a SD of (.671). The factor "Thesis writing stress" had a mean of (M=3.72) and a (SD=.537). 'Supervisor relationship stress' had a mean of 3.13 and SD of (.766). Academic stress had a mean of 3.69 and (SD=.684) for the factor. Socio-economic stress had a mean of (M=3.57) and (SD=.579). Male and female research students both experience stress during their MPhil and PhD studies, as indicated by the overall mean of "Research Stress" (M= 3.52) and (SD=.412).

H₀ 1: There is no significant difference in the Emotional Intelligence levels of the male & female research students.

Significant difference were found ($t = -5.000, p = <.001$) in the scores with mean for male ($M = 2.9410, SD = .37710$) and female ($M = 2.1201, SD = .27214$). Hence *hypothesis one* was rejected.

Table 3: Differences in scores between Gender (Male & Female) and Emotional Intelligence (N=300)

Qualification		N	Mean	SD	t-value	Sig. (2-tailed)
Emotional intelligence	Male	160	2.9410	.37710	-5.000	.000
	Female	140	2.1201	.27214		

H₀ 2: There is no significance difference in the stress of the male and female research scholars.

The scores with the mean score for males ($M = 3.2944, SD = .20146$) and females ($M = 3.7921, SD = .39689$) were significantly different ($t = 8.990, p = .001$). *H₀ 2:* was thus rejected.

Table 4: Differences in scores between Gender (Male & Female) and Research Stress (N=300)

Qualification		N	Mean	SD	t-value	Sig. (2-tailed)
Research Stress	Male	160	3.2944	.20146	8.990	.000
	Female	140	3.7921	.39689		

H₀ 3: There is negative effect of EI on Research Stress of scholars.

Table 4 shows that research stress have a greater coefficient ($-.784$) and $p < 0.01$ which shows that the result is significant. This suggests that the independent variable (emotional intelligence) is significant and leave negative effect on research stress. Hence, *H₀ 3:* was accepted.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.271	.056		92.898	.000
EI	-.699	.024	-.784	-29.238	.000

a. Dependent Variable: RS

DISCUSSION

This study compared male and female research students' emotional intelligence and stress levels. The researcher evaluates four aspects of emotional intelligence in research students: the ability to perceive emotions, control one's own emotions, and control others' emotions, use emotions, and overall emotional intelligence. The research students (male and female) are low at perceiving emotions, as evidenced by the mean for the first factor, 'perception of emotions', being (M= 2.27) and (SD=.452). The second factor, "managing own emotions," had a mean score of 2.39 and (SD=.466), indicating that both male and female research students struggle to control their emotions. 'Managing Others' Emotions' had a mean score of (M= 2.77) and (SD=.581), respectively. Utilizing emotions, the final and fourth factor, had a mean score of 2.60 and (SD=.702), indicating that both male and female research students struggle with this skill. Last but not least, the average "Emotional Intelligence" score was 2.30, with a SD of (.337), indicating that research students do not possess emotional intelligence.

Research Stress was the dependent variable in this study. Researchers assessed five aspects of research stress in male and student participants: coursework, thesis writing, supervisor relationship, and academic, socioeconomic, and overall research stress. The average rating for the factor "Coursework stress" was (M=3.65), and (SD=.671), indicating that both male and female research students experience stress related to their coursework for their MPhil and PhD degrees. Research students, both male and female, are under much stress while writing their theses, as evidenced by the mean score for the factor "Thesis writing stress" (M= 3.72) and (SD=.537). Contributing to their stress and anxiety during the dissertation writing process, thesis is a significant source of stress for Ph.D. scholars (Bazrafkan et al., 2016). Research students, both male and female, are experiencing supervisor relationship stress, as evidenced by the mean for the "Supervisor relationship stress" (3.13) and (SD=.766). The root causes of relationships with supervisors and socioeconomic problems are an inappropriate and an undefined and unclear educational environment. (Bazrafkan, 2016). Research students experience stress in academics while enrolled in universities, as evidenced by the mean for "Academic stress" (3.69) and (SD=.684). Research students experience socioeconomic stress during their MPhil and PhD studies, as indicated by the mean of factor "Socioeconomic stress" Mean (3.57) and (SD=.579). Wang (2019) showed that 10 Chinese PhD students experienced stress from various socioeconomic and academic factors. The overall mean score for "Research Stress" was (3.52), and (SD=.412), indicating that stress is a problem for research students who are enrolled in university programs.

T-test was used to compare the mean differences male and female student's EI. The mean for male students (M= 2.9410, SD=.37710) and female students (M= 2.1201,

SD=.27214) were found to be significantly different ($t = -5.000$, $p = .001$), indicating that male students have higher levels of emotional intelligence than female students. According to Rehana's (2016) earlier research, students vary in stress tolerance and emotional intelligence. While female university students experience more stress, male students have higher emotional intelligence (EI) levels. T-tests were also run to compare the research stress experienced by the male and female respondents. The mean score for male students ($M = 3.2944$, $SD = .20146$) and female students ($M = 3.7921$, $SD = .39689$) showed significant differences ($t = -8.990$, $p = .001$) and that female students are under more stress than male students. It supports the earlier research by Graves (2021), which discovered that females experienced more significant stress levels than males. The effect of emotional intelligence on the research stress of MPhil and PhD respondents was evaluated using a regression analysis test. Emotional intelligence had a negative impact ($-.784$) on both male and female scholars' levels of research stress. The differences are significant, as indicated by the test statistic's significance level ($p = 0.01$). It also lends credence to a prior study by Alam (2021), which discovered that EI significantly impacts a student's stress.

The study's practical analysis revealed that research students have low levels of emotional intelligence. They struggle to recognize, control, and make use of their emotions. At every stage of their research program, research students also deal with various stressors. Coursework, thesis, supervisor relationships, academic pressure, and socioeconomic pressure are all included. Therefore, both male and female students' research stress was negatively impacted by emotional intelligence. Less emotional intelligence is associated with higher stress levels, so we should help students, particularly female students, develop it. The ability of research students to manage stress may be improved by raising their emotional intelligence, which should result in better research outcomes and possibly even higher post-graduation rates. Therefore, stress management courses should be available to students at every university. However, these skills cannot be learned through lectures and discussions; we must concentrate on theoretical knowledge. These courses can assist students in learning emotional, cognitive, and social emotional skills. Students should be aware of fundamental concepts and abilities that will enable them to excel in or achieve research performance goals and develop practical leadership abilities.

RECOMMENDATIONS

In order to reduce stress, it is preferable to use student counseling services, curriculum revisions, and policy changes that address identified stressors.

Effective supervisor communication and other helpful staff members are necessary to help the student complete the thesis task and reduce stress.

In order to become more aware of these stressors and employ creative stress

management techniques, administrators, master's students, and doctoral students need to improve.

Students, faculty, and staff must find ways to lessen stress and raise EI. In order to help master's and doctoral students manage stress, faculty members and supervisors should identify the causes of stress and teach them problem-solving and critical thinking skills.

Universities should hold seminars to help students learn more about their emotions or how emotions impact their academic and research performance.

REFERENCES

- Agolla, J. E., & Ongori, H. (2009). *An assessment of academic stress among undergraduate students : The case of University of Botswana*. 4(Feb:), 63–70.
- Alam, F., Yang, Q., Bhutto, M. Y., & Akhtar, N. (2021). The Influence of E-Learning and Emotional Intelligence on Psychological Intentions: Study of Stranded Pakistani Students. *Frontiers in Psychology*, 12(August), 1–11.
<https://doi.org/10.3389/fpsyg.2021.715700>.
- Bahat, B., & Ovsenik, M. (2020). Emotional Intelligence in Secondary School Students. *Revija Za Univerzalno Odličnost*, 9(4), 293–308.
<https://doi.org/10.37886/ruo.2020.018>.
- Bazrafkan, L., Shokrpour, N., Yousefi, A., & Yamani, N. (2016). Management of stress and anxiety among PhD students during thesis writing: A qualitative study. *Health Care Manager*, 35(3), 231–240.
- Bryant, S. E., & Malone, T. I. (2015). AN EMPIRICAL STUDY OF EMOTIONAL. 7(1), 1–11.
- Busari, A. (2012). Evaluating the Relationship between Gender, Age, Depression and Academic Performance among Adolescents.
- Fida, Ghaffar, & Zaman (2018). Gender Comparison of Emotional Intelligence of University Students.
- Graves, B. S., Hall, M. E., Dias-Karch, C., Haischer, M. H., & Apter, C. (2021). Gender differences in perceived stress and coping among college students. *PLoS ONE*, 16(8 August), 1–12.
<https://doi.org/10.1371/journal.pone.0255634>
- Habeeb, K. T. (2015). A correlational study of emotional intelligence and stress. management in adolescents studying at higher secondary level of Aurangabad city 2, 2916–2928.
- Hagenauer, G., Gläser-Zikuda, M., & Moschner, B. (2018). University students' emotions, life-satisfaction and study commitment: a self-determination theoretical perspective. *Journal of Further and Higher Education*, 42(6),

-
- 808–826. <https://doi.org/10.1080/0309877X.2017.1323189>.
- Jassal, N. (2021). Relationship between Academic Stress and Emotional Intelligence in High School Students. *Psychology and Cognitive Sciences – Open Journal*, 7(1), 30–35. <https://doi.org/10.17140/pcsoj-7-162>.
- Khan, M. J., Altaf, S., & Kausar, H. (2013). *Effect of Perceived Academic Stress on Students' Performance*. 7(2), 146–151.
- Mackie, S. A., & Bates, G. W. (2019). Contribution of the doctoral education environment to PhD candidates' mental health problems: a scoping review. *Higher Education Research and Development*, 38(3), 565–578. <https://doi.org/10.1080/07294360.2018.1556620>
- Miri, M. R., Kermani, T., Khoshbakht, H., & Moodi, M. (2016). *The relationship between emotional intelligence and academic stress in students of medical sciences*. 2(July), 1–5.
- Moghal, F et al., (2016). *Relationship of Emotional Intelligence and Stress in Undergraduate Medical Students*. 5(3), 8–11. <https://doi.org/10.15406/jpcpy.2016.05.00282>.
- Muteeb, H. (2020). Emotional Intelligence. <https://nation.com.pk/08-May-2017/emotional-intelligence>.
- Ng, K. C., Chiu, W., & Fong, B. Y. F. (2016). *A Review of Academic Stress among Hong Kong Undergraduate Students*. 6(8), 531–540. [https://doi.org/10.15341/jmer\(2155-7993\)/08.06.2016/003](https://doi.org/10.15341/jmer(2155-7993)/08.06.2016/003).
- Reddy, K. J., & Karishmarajanmenon, M. S. (2018). *Academic Stress and its Sources among University Students*. 11(1), 531–537.
- Rehana, R. (2016). Impact of emotional intelligence on students' stress at university level.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, cognition and personality Vol. 9(3)*, 185–211. <https://doi.org/10.2190%2FDUGG-P24E-52WK-6CDG>
- Saxena, et al., (2014). Gender correlation of stress levels and sources of stress among first year students in a medical college. *Indian journal of physiology and pharmacology*. 58. 147-51.
- Schutte N.S., Malouff, J.M. and Bhullar, N. (2009). *The Assessing Emotions Scale. Assessing Emotional Intelligence. Springer, Berlin, 119-134*.
- Suleman, Q. S., Hussain, I., Syed, M. A., Parveen, R., Lodhi, S., & Mahmood, Z. (2019). *Association between emotional intelligence and academic success among undergraduates : A cross-sectional study in*. 1–22.
- Talib, N., & Zia-ur-rehman, M. (2012). Academic Performance and Perceived Stress among University Students. *Educational Research and Reviews*, 7(5), 127–132. <https://doi.org/10.5897/ERR10.192>.
- Teh et al., (2015). Depression, Anxiety and Stress among undergraduate students: A cross sectional study. *Open Journal of Epidemiology*.05 260-268.
-

- T.M Evans et al. (2018). More than one-third of graduate students report being depressed. *Nature Biotech* 36, 282-284.
- Wang, X., Wang, C., & Wang, J. (2019). Towards the contributing factors for stress confronting Chinese PhD students. *International Journal of Qualitative Studies on Health and Well-Being*, 14(1).
- Whltbourne, K.S. (2021). A Surprising new way to use your Emotional Intelligence. <https://www.psychologytoday.com/us/blog/fulfillment-any-age/202107/surprising-new-way-use-your-emotional-intelligence>