

## Academic Stress, Emotional Intelligence, and Coping Styles of University Students

\*Mahajan, \*\*Saksham Kesarwani, \*\*\*\*Rebeka Debbarma, \*\*\*\*Swati

### Abstract

Academic stress among university students is a pervasive issue characterized by emotional, physical, and psychological strain stemming from academic demands. This stress can manifest in various forms, impacting mental and physical health, academic performance, and overall well-being. The present study aimed to investigate the relationship between academic stress, coping styles, and emotional intelligence. Further, it also attempted to find out the role of coping styles and emotional intelligence on academic stress among university students and explored potential gender differences across these variables. A total of 200 willing university students aged 18–26 from various universities in Bathinda district, Punjab, were selected using a multistage random sampling technique. The results showed no significant gender difference in the study variables. However, a significant impact of emotional intelligence on the academic stress of the student was observed, suggesting that higher emotional intelligence may serve as a protective factor against academic stress.

**Keywords:** Academic stress, coping styles, emotional intelligence, university students

For university students, being competitive and for surviving in such a competitive environment where there are many educational reforms such as new educational policy (NEP, 2020), technological advancements, and high academic competition (Abouserie, 1994) can sometimes be a double-edged sword as it can drive them to excel and be persistent. Still, at the same time, it also creates academic stress (Folkman & Lazarus, 1985; Posselt & Lipson, 2016) and can have a detrimental effect on students' motivation (Ames, 1992; Weiner, 1979). Moreover, when academic stress has been sustained for a long time and is perceived as intolerable to the individual experiencing it, it can lead to fatal conditions such as helplessness (Abramson et al., 1978), and depression (Peterson & Barrett, 1987), thereby placing such students' academic careers and their futures at risk (Sun et al., 2012). The academic stress can affect the students not only psychologically by impairing their cognitive ability to function effectively but also biologically (Izzati, 2020). A model of test anxiety by Von Der Embse et al. (2017) postulates that the biological and psychological state elicited by stress related to academic may ramify deficits in the skills and knowledge of individuals and influence the prevalence and severity of test anxiety. Psychological distress may develop in individuals who are exposed to a stressful environment (Agnew, 2017). Academic stress is caused by various academic expectations and is found to affect different genders differently; for instance, males have less reported academic stress when compared to females (Agnew, 2017; Jones & Hattie, 1991). Moreover, academic stress is also influenced by the ethnicity of the individual. Students from particular ethnic groups and socioeconomic backgrounds are more prone to academic stress (Coney & West, 1979; Jones & Hattie, 1991).

There are various cognitive factors that divide students into two groups. One group is more susceptible to stress due to inadequate cognitive appraisal and planning. In contrast, the other group, although they also experience stress, is more resilient.

These students are less likely to be affected by minor setbacks, can handle challenging situations effectively, and are better at managing stress and overcoming obstacles (Dweck & Leggett, 1988; Perry & Magnusson, 1989; Struthers & Perry, 1996).

To explain this discrepancy in students' responses to stressful events, Lazarus proposed a cognitive model of stress (Folkman & Lazarus, 1985), which emphasizes the role of cognitive appraisal and an individual's perceived resources and ability to cope with stress. According to this model, stress perception and coping occur in three stages: (1) primary appraisal, where the individual evaluates the threat posed by the situation; (2) secondary appraisal, where they assess their available resources to deal with the situation; and (3) coping, which involves efforts to manage or overcome the stressor. Within this coping stage, two specific styles are identified: problem-focused coping (PFC) and emotion-focused coping (EFC). PFC involves attempting to eliminate or reduce the stressor through strategic thinking and action, while EFC aims to manage the emotional distress associated with the stressor. EFC is typically used when the individual perceives the stressor as unavoidable (Folkman & Lazarus, 1985). Additionally, Billings and Moos (1985) proposed three coping styles: (1) active behavioral coping, where individuals take direct action to manage the stressor; (2) active cognitive coping, which involves reframing one's perception of the stressor; and (3) avoidance coping, where the stressor is ignored or denied. Research shows that students who employ active coping strategies are less prone to academic stress and are at a lower risk of developing mental health issues such as depression, compared to those who rely on avoidance coping strategies (Verger et al., 2009).

Unlike the earlier theories of coping, which primarily conceptualize coping as a dynamic process dependent on situational appraisals, alternative perspectives have emerged that view coping as a relatively stable trait influenced by personality factors (Billings & Moos,

\*Research Scholar, Department of Psychology, Central University of Punjab, Bhatinda, Punjab, Email: mahajanindora007@gmail.com

\*\*Research Scholar, Department of Psychology, Central University of Punjab, Bhatinda, Punjab, Email: sakshammmpsy@gmail.com

\*\*\*Assistant Professor, Department of Psychology, (corresponding author), Central University of Punjab, Bhatinda, Punjab, Email: rebeka8585@gmail.com

\*\*\*\*Research Scholar, Department of Psychology, Central University of Punjab, Bhatinda, Punjab, Email: calmocan09.99@gmail.com

1985). These trait-based approaches suggest that individual differences in coping may be rooted in enduring personality characteristics. For instance, extroverted students (Cantor & Norem, 1989), optimistic students (Cantor & Norem, 1989; Gallagher, 1990), students with high self-esteem (Baumeister et al., 1993), and with internal locus of control (Aspinwall & Taylor, 1992) are generally more successful in managing and overcoming academic stress. These individuals are better equipped to handle the demotivating effects of negative events, indicating that personality traits can serve as protective factors in the face of stress.

Since Galton's early work, researchers have explored various constructs of intelligence. Thorndike proposed a multifactor theory, which included social intelligence, the ability to understand and manage social relationships. Similarly, Gardner (1993) introduced the theory of multiple intelligences, identifying intrapersonal and interpersonal intelligences as distinct domains. The concept of emotional intelligence (EI) was first introduced by Salovey and Mayer (1990), who defined it as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Mayer & Salovey, 1993). Mayer (1999) later conceptualized EI through three models: the ability model, which views EI as a mental ability; the mixed model, which includes personality traits such as optimism and well-being (Mayer et al., 1999); and the trait model, which sees EI as a dispositional characteristic measured through self- or peer-report.

This understanding of EI becomes particularly relevant in the context of university students, who often face significant psychological adjustment due to new academic and social demands (Klassen et al., 2013; Rahim, 2017). Therefore, coping with this newly initiated academic stress needs an adaptation to these newly established social norms and situations (Kermani et al., 2013c). Literature indicates that there is a negative correlation between EI and stress, which explains that the lower the EI, the greater the stress, and vice versa, including the biological indicators of academic stress and self-perceived stress among students (Birks et al., 2009; Por et al., 2011). Salovey and Mayer (1990) found that individuals with higher EI are more resilient to stress and better equipped to manage challenging situations (Ciarrochi & Forgas, 2013; Salovey & Mayer, 1990). Encouragingly, research suggests that EI is not fixed; it can be taught, developed, and enhanced over time.

Although several studies have demonstrated a relationship between low EI and higher levels of stress (Mayer & Salovey, 1998; Mayer et al., 1999, 2000; Salovey & Mayer, 1990), limited research has explored how EI can actively contribute to stress reduction. One possible explanation is that individuals with higher EI exhibit greater flexibility in their

coping strategies and responses to stressful situations. An individual high on EI is more expected to display adaptive coping strategies, for instance looking for social support or aiming to solve the problem and is less likely to indulge in a maladaptive coping strategy, such as avoiding the problem, risk-taking, and self-criticism (Prentice et al., 2020). This pattern of behavior can be better understood by conceptualizing EI as a set of competencies that enable individuals to manage, interpret, and regulate emotions—both their own and those of others—thereby promoting more effective interpersonal interactions and emotional regulation (O'Connor, 2019). As a result, students with higher EI are generally better equipped to handle academic stressors and failures, which in turn leads to a lower overall experience of stress (Dasor et al., 2023). Given the significance of EI in helping university students managing academic stress and the role of coping strategies in alleviating that stress, the present study aims to investigate the following research questions:

- i) Is there any gender difference in academic stress, emotional intelligence, and coping styles of university students of Bathinda, Punjab?
- ii) Is there any association between academic stress, emotional intelligence, and coping styles among university students?
- iii) What is the impact of emotional intelligence and coping styles on academic stress among university students?

## Method Sample

A total of 200 university students were selected from the Bathinda district of Punjab, India. For the selection of the sample, a multistage random sampling technique was employed, and only those participants were selected for the study who were willing and ready to participate in this study. The inclusion criteria were: (a) university students who were currently pursuing their studies from different universities in the Bathinda district of Punjab, and (b) the age of the participants was between 18 and 26 years.

## Tools

*Academic Stress Scale:* This is a self-report scale developed by Rajendren and Kaliappan (1990). It consists of 40 statements. The responses are scored on a five-point Likert-type scale, which ranges from 0 to 4. A high score indicates more academic stress and vice versa. The reliability of the scale was found to be 0.82.

*Brief COPE Inventory:* The Brief-COPE (Carver, 1997) consists of 28 items and measures ways of coping with stressful events. It is a self-report questionnaire, and the responses are rated on the four-point Likert scale. The scale has good reliability and validity.

*Emotional Intelligence Scale:* It was developed by Wong et al. (2002). It is based on four factors: self-emotion appraisal, others' emotion appraisal, use of

emotion, and regulation of emotion. The responses are scored on seven-point Likert-type questions, which range from 1 to 7. A high score indicates a higher level of EI. The internal consistency of the scale ranges between .83 to .90.

**Procedure**

Data was collected from two hundred (200) university students of Bathinda, Punjab. For the execution of data collection, it required permission from the competent authorities of different Universities, and a tentative schedule was planned for visits to each University, which was taken into account. Before administering the scales, rapport was established with the subjects, and then the subjects were requested to fill out the consent form. The ethical norms of the research were followed to collect data from the participants. Data were collected through group administration, and all completed data sheets were carefully reviewed to ensure completeness and accuracy. After data collection, the data sheets were scored properly and then analyzed using SPSS. For data analysis, mean, SD, t-test, and regression analysis were computed.

**Results and Interpretation**

**Table 1: Showing gender differences in academic stress, emotional intelligence, and coping styles**

Table 1 presents gender differences in academic stress, EI, and coping strategies. The results indicated no significant difference between male and female students in academic stress and EI. The students did not differ significantly in their coping strategies also ( $p > .05$ ).

**Table 2: Showing relationship between academic stress, emotional intelligence, and coping styles**

Variables	1	2	3	4	5
Academic stress		-.116	-.023	-.054	-.278*
Problem-focused coping (PFC)			.563*	.476*	.119
Emotion-focused coping (EFC)				.495*	.021
Avoidant coping styles (ACS)					.713
Emotional intelligence (EI)					

Note - \* significant at 0.01 level

Table 2 represents the correlation between academic stress, EI, and coping styles. Academic stress is found to be negatively correlated with EI ( $r = -.278, p < 0.01$ ),

EI decreases, academic stress increases. Results also showed a significant positive correlation between PFC and EFC ( $r = .563, p < 0.01$ ) and ACS ( $r = .476, p < 0.01$ ), respectively. Moreover, a positive correlation was found between EFC and AFC ( $r = .495, p < 0.01$ ).

Table 3 shows the simple linear regression analysis, which was used to see the impact of EI on academic stress. The results indicated that the predictor (i.e., emotional intelligence) explained 77% ( $R^2 = 0.77$ ) of the variation in academic stress [ $F(1,197) = 16.51, p < 0.001$ ]. It implies that due to EI, 77% of the variance in academic stress can be explained. Moreover, through the regression equation, academic stress can be predicted as well based on the constant (66.265) and  $b$ -value (-.301). The regression findings are found to be consistent with the past studies (Pau & Croucher, 2003; Pau et al., 2004; Yusoff et al., 2021). Table 4 presents the impact of coping styles on academic stress among university students. Findings indicated that coping styles do not have a statistically significant impact on academic stress.

**Discussion**

The study highlights the academic stress among university students and the role of coping styles and EI in the stress experienced by them. This study found no gender differences, which contrasts with previous research that reported gender differences in academic stress, emotional intelligence (EI), and coping styles (Barrett, 2000; Brackett & Mayer, 2003; Day & Carroll, 2004; Hojat, 1999; Lloyd & Gartrell, 1981; Matud, 2004; Palmer, 2005). The absence of gender differences in academic stress, EI, and coping styles

among university students may be attributed to increasingly equal academic expectations, shared social pressures, and similar access to psychological

**Table 3: Simple linear regression showing the impact of emotional intelligence on academic stress**

Variables	SE	95% CI		B	t	P
		LB	UB			
Emotional intelligence	-.301	-.447	-.155	-.278	-4.064	.001**

Note: Dependent Variable = Academic Stress  
 $F(1,197) = 16.51^{**}, p < 0.001, R = .077$

SE = Standard error,

CI = Confidence Interval for B, LB = Lower

Bound, UB = Upper bound

\*\* =  $p < .001$

implying the inverse relationship between emotional intelligence and academic stress. This indicates that as

resources across genders. As traditional gender roles evolve, both male and female students are likely to

face and manage stressors in comparable ways. Additionally, contemporary educational environments encourage emotional awareness and adaptive coping regardless of gender. Studies have found that these

suggest that EI can be developed, improved, and increased (Garrett-Peters & Fox, 2007; Mayer & Salovey, 1993; Radford, 2003; Zahed-Babelan & Moenikia, 2010).

**Table 4: Simple linear regression showing the impact of coping styles on academic stress**

Variables	SE	95% CI		B	t	p
		LB	UB			
PFC	3.26	-11.74	1.11	-5.317	-1.631	0.104
EFC	3.57	-4.34	9.72	2.68	0.754	0.452
AFC	3.46	-7.56	6.06	-0.749	-0.217	0.829

Note: Dependent Variable = Academic Stress

F (3,195) = 1.08,  $p > 0.05$ , R = .128

SE = Standard error,

CI = Confidence Interval for B, LB = Lower Bound, UB = Upper bound

factors contribute to minimal or no significant gender-based variation in stress, EI, or coping strategies (Bayram & Bilgel, 2008; Dyson & Renk, 2006; m Misra & McKean, 2000).

The present study brings forth that there is a negative relationship between academic stress and EI. The negative correlation clearly shows that EI can buffer the stress experienced only when an individual is high on its dimensions (Birks et al., 2009). The present results were found to be consistent with the past findings, suggesting that low EI is associated with high levels of academic stress (Birks et al., 2009; Kasper et al., 2005; Newsome et al., 2000; Por et al., 2001). The individual with higher EI has a better emotional response to the stressful situation, as EI provides them with accuracy in mood regulation and control (Jahan et al., 2022). Khorasani et al. (2023b) in their study showed that EI can help to resolve conflicts, and thus reduce frustration among students. However, no significant correlation was found between academic stress and coping styles. This may be due to the complexity and variability of individual coping mechanisms, which are influenced by personal, situational, and cultural factors. Students use a variety of coping strategies, both effective and ineffective, which may affect the overall relationship. Additionally, coping effectiveness depends on the individual and situation, linking to stress less clearly (Compas et al., 200; Dyson & Renk, 2006; Folkman & Moskowitz, 2004).

The study also establishes the predictive role of EI on academic stress. It was found that the major portion of academic stress is predictable through the level of EI present within the individual. According to Salovey, people with higher EI are less vulnerable to stressful situations (Mayer et al., 2000). Studies have shown that the components of EI regulate the physiological, behavioural, and emotional response of students while responding to stressful academic situations (Khorasani et al., 2023b). EI is found to predict academic stress as it also has a positive role in predicting academic performance, engagement, and psychological well-being of students in academic settings (McEown et al., 2023). Various studies

The present study showed no significant impact of coping styles on academic stress. This may be attributed to individual differences and contextual factors that influence how coping strategies are used and perceived. Coping is highly situation-dependent, and its effectiveness can vary across individuals and circumstances (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984). Moreover, inconsistent or maladaptive use of coping strategies may reduce their effectiveness in managing academic stress (Compas et al., 2001). These factors together may explain why coping styles did not significantly predict academic stress in the current study.

#### Conclusion

University students often face high academic demands, which can lead to stress and negatively affect their well-being and academic performance. The present study examined the relationship between academic stress, emotional intelligence (EI), and coping styles among university students. Findings revealed no significant gender differences in academic stress, EI, and coping styles. However, a significant negative correlation was observed between EI and academic stress, indicating that higher emotional intelligence is associated with a lower level of academic stress and thus showing its significant impact on the academic stress of university students. In contrast, coping styles were not found to have a significant impact on academic stress. These results suggest that fostering emotional intelligence among students may be more effective in managing academic stress than focusing solely on coping strategies. The findings highlight the importance of integrating EI training among university programs to help students to manage academic stress more effectively.

#### References

- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self esteem in university students. *Educational Psychology*, 14(3), 323–330. <https://doi.org/10.1080/0144341940140306>
- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*,

- 87(1), 49–74. <https://doi.org/10.1037/0021-843x.87.1.49>
- Agnew, R. (2017). General Strain Theory: Current status and directions for further research. In *Routledge eBooks* (pp. 101–123). <https://doi.org/10.4324/9781315130620-4>
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261–271. <https://doi.org/10.1037/0022-0663.84.3.261>
- Aspinwall, L. G., & Taylor, S. E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 63(6), 989–1003. <https://doi.org/10.1037/0022-3514.63.6.989>
- Barrett, L. F., Lane, R. D., Sechrest, L., & Schwartz, G. E. (2000). Sex Differences in emotional awareness. *Personality and Social Psychology Bulletin*, 26(9), 1027–1035. <https://doi.org/10.1177/01461672002611001>
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of Personality and Social Psychology*, 64(1), 141–156. <https://doi.org/10.1037/0022-3514.64.1.141>
- Bayram, N., & Bilgel, N. (2008). The prevalence and socio-demographic correlations of depression, anxiety and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology*, 43(8), 667–672. <https://doi.org/10.1007/s00127-008-0345-x>
- Billings, A. G., & Moos, R. H. (1985). Life stressors and social resources affect posttreatment outcomes among depressed patients. *Journal of Abnormal Psychology*, 94(2), 140–153. <https://doi.org/10.1037/0021-843x.94.2.140>
- Birks, Y., McKendree, J., & Watt, I. (2009). Emotional intelligence and perceived stress in healthcare students: a multi-institutional, multi-professional survey. *BMC Medical Education*, 9(1). <https://doi.org/10.1186/1472-6920-9-61>
- Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29(9), 1147–1158. <https://doi.org/10.1177/0146167203254596>
- Cantor, N., & Norem, J. K. (1989). Defensive pessimism and stress and coping. *Social Cognition*, 7(2), 92–112. <https://doi.org/10.1521/soco.1989.7.2.92>
- Ciarrochi, J., Forgas, J. P., & Mayer, J. D. (2013). Emotional intelligence in everyday life. In *Psychology Press eBooks*. <https://doi.org/10.4324/9780203943397>
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87–127. <https://doi.org/10.1037/0033-2909.127.1.87>
- Coney, Y., & West, C. K. (1979). Academic pressures and the black adolescent. *Contemporary Educational Psychology*, 4(4), 318–323. [https://doi.org/10.1016/0361-476x\(79\)90052-3](https://doi.org/10.1016/0361-476x(79)90052-3)
- Dasor, M. M., Jafridin, A. A., Azhar, A. A., Asma, A. a. A., Manivannan, P. C., Bilal, S., Yusof, N., & Sabri, B. a. M. (2023). Emotional intelligence, depression, stress and anxiety amongst undergraduate dental students during the COVID-19 pandemic. *International Journal of Public Health*, 68. <https://doi.org/10.3389/ijph.2023.1604383>
- Day, A. L., & Carroll, S. A. (2003). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and Individual Differences*, 36(6), 1443–1458. [https://doi.org/10.1016/s0191-8869\(03\)00240-x](https://doi.org/10.1016/s0191-8869(03)00240-x)
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256–273. <https://doi.org/10.1037/0033-295x.95.2.256>
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, 62(10), 1231–1244. <https://doi.org/10.1002/jclp.20295>
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a Middle-Aged Community sample. *Journal of Health and Social Behavior*, 21(3), 219. <https://doi.org/10.2307/2136617>
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150–170. <https://doi.org/10.1037/0022-3514.48.1.150>
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745–774. <https://doi.org/10.1146/annurev.psych.55.090902.141456>
- Gallagher, A. M. (1990). Sex Differences InThe Performance Of High-Scoring Examinees OnThe Sat®-M. *ETS Research Report Series*, 1990(2). <https://doi.org/10.1002/j.2333-8504.1990.tb01363.x>
- Gardner, H. (1993). Multiple intelligences: the theory in practice. *Choice Reviews Online*, 31(02), 31–1214. <https://doi.org/10.5860/choice.31-1214>
- Garrett-Peters, P. T., & Fox, N. A. (2007). Cross-cultural differences in children’s emotional reactions to a disappointing situation. *International Journal of Behavioral Development*, 31(2), 161–169. <https://doi.org/10.1177/0165025407074627>
- Hojat, M., Glaser, K., Xu, G., Veloski, J. J., & Christian, E. B. (1999). Gender comparisons of medical students’ psychosocial profiles. *Medical Education*, 33(5), 342–349. <https://doi.org/10.1046/j.1365-2923.1999.00331.x>
- Izzati, I. D. C., Tentama, F., & Suyono, H. (2020). Academic stress scale: a psychometric study for academic stress in senior high school. *European Journal of Education Studies*, 7(7).

- Jahan, S. S., Nerali, J. T., Parsa, A. D., & Kabir, R. (2022). Exploring the Association between Emotional Intelligence and Academic Performance and Stress Factors among Dental Students: A Scoping Review. *Dentistry Journal*, 10(4), 67. <https://doi.org/10.3390/dj10040067>
- Jones, R.W. & Hattie, J.A. (1991). Academic stress amongst adolescents: An examination by ethnicity, grade, and sex. Paper presented at the Annual Conference of the New England Educational Research Organization, April 24-26, in Portsmouth.
- Kasper, G. M., Harrington, K. V., Carter, L. D., & Smith, W. J. (2005). Coping Strategies and Emotional intelligence: New Perspectives on Computing students. *Americas Conference on Information Systems*, 249. <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1793&context=amcis2005>
- Kermani, T., Miri, M., Khoshbakht, H., & Moodi, M. (2013). The relationship between emotional intelligence and academic stress in students of medical sciences. *Journal of Education and Health Promotion*, 2(1), 40. <https://doi.org/10.4103/2277-9531.115836>
- Khorasani, E. C., Ardameh, M., Sany, S. B. T., Tehrani, H., Ghavami, V., & Gholian-Aval, M. (2023b). The influence of emotional intelligence on academic stress among medical students in Neyshabur, Iran. *BMC Psychiatry*, 23(1). <https://doi.org/10.1186/s12888-023-05344-0>
- Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring Teacher Engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research*, 1(2). <https://doi.org/10.14786/flr.v1i2.44>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lloyd, C., & Gartrell, N. K. (1981). Sex differences in medical student mental health. *American Journal of Psychiatry*, 138(10), 1346–1351. <https://doi.org/10.1176/ajp.138.10.1346>
- Matud, M. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401–1415. <https://doi.org/10.1016/j.paid.2004.01.010>
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17(4), 433–442. [https://doi.org/10.1016/0160-2896\(93\)90010-3](https://doi.org/10.1016/0160-2896(93)90010-3)
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267–298. [https://doi.org/10.1016/s0160-2896\(99\)00016-1](https://doi.org/10.1016/s0160-2896(99)00016-1)
- Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In *Cambridge University Press eBooks* (pp. 396–420). <https://doi.org/10.1017/cbo9780511807947.019>
- Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 449–460). Cambridge: University Press.
- McEown, K., McEown, M. S., & Oga-Baldwin, W. L. Q. (2023). The role of trait emotional intelligence in predicting academic stress, burnout, and engagement in Japanese second language learners. *Current Psychology*, 43(2), 1395–1405. <https://doi.org/10.1007/s12144-023-04296-8>
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41–51.
- Newsome, S., Day, A. L., & Catano, V. M. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, 29(6), 1005–1016. [https://doi.org/10.1016/s0191-8869\(99\)00250-0](https://doi.org/10.1016/s0191-8869(99)00250-0)
- O'Connor, P. J., Hill, A., Kaya, M., & Martin, B. (2019). The Measurement of Emotional Intelligence: A critical review of the literature and recommendations for researchers and practitioners. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01116>
- Palmer, B. R., Gignac, G., Manocha, R., & Stough, C. (2005). A psychometric evaluation of the Mayer–Salovey–Caruso Emotional Intelligence Test Version 2.0. *Intelligence*, 33(3), 285–305. <https://doi.org/10.1016/j.intell.2004.11.003>
- Pau, A. K. H., & Croucher, R. (2003). Emotional intelligence and perceived stress in dental undergraduates. *Journal of Dental Education*, 67(9), 1023–1028. <https://doi.org/10.1002/j.0022-0337.2003.67.9.tb03685.x>
- Pau, A. K. H., Croucher, R., Sohanpal, R., Muirhead, V., & Seymour, K. (2004). Emotional intelligence and stress coping in dental undergraduates — a qualitative study. *BDJ*, 197(4), 205–209. <https://doi.org/10.1038/sj.bdj.4811573>
- Perry, R. P., & Magnusson, J. (1989). Causal attributions and perceived performance: Consequences for college students' achievement and perceived control in different instructional conditions. *Journal of Educational Psychology*, 81(2), 164–172. <https://doi.org/10.1037/0022-0663.81.2.164>
- Peterson, C., & Barrett, L. C. (1987). Explanatory style and academic performance among university freshman. *Journal of Personality and Social Psychology*, 53(3), 603–607. <https://doi.org/10.1037/0022-3514.53.3.603>
- Por, J., Barriball, L., Fitzpatrick, J., & Roberts, J. (2011). Emotional intelligence: Its relationship to stress, coping, well-being and professional performance in nursing students. *Nurse Education Today*, 31(8), 855–860. <https://doi.org/10.1016/j.nedt.2010.12.023>
- Posselt, J. R., & Lipson, S. K. (2016). Competition, Anxiety, and Depression in the College Classroom: Variations by Student Identity and Field of study. *Journal of College Student Development*, 57(8), 973–989. <https://doi.org/10.1353/csd.2016.0094>
- Prentice, C., Zeidan, S., & Wang, X. (2020). Personality, trait EI and coping with COVID 19 measures. *International Journal of Disaster Risk*

- Reduction*, 51, 101789. <https://doi.org/10.1016/j.ijdr.2020.101789>
- Radford, M. (2003). Emotional intelligence and education. *International Journal of Children S Spirituality*, 8(3), 255–268. <https://doi.org/10.1080/1364436x.2003.10807115>
- Rahim, M. A. (2017). Managing conflict in organizations. In *Routledge eBooks*. <https://doi.org/10.4324/9780203786482>
- Rosario, M., Shinn, M., Mørch, H., & Huckabee, C. B. (1988). Gender differences in coping and social supports: Testing socialization and role constraint theories. *Journal of Community Psychology*, 16(1), 55–69. [https://doi.org/10.1002/1520-6629\(198801\)16:1](https://doi.org/10.1002/1520-6629(198801)16:1)
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/dugg-p24e-52wk-6cdg>
- Struthers, C. W., & Perry, R. P. (1996). Attributional style, attributional retraining, and inoculation against motivational deficits. *Social Psychology of Education*, 1(2), 171–187. <https://doi.org/10.1007/bf02334731>
- Sun, J., Dunne, M. P., Hou, X., & Xu, A. (2012). Educational stress among Chinese adolescents: individual, family, school and peer influences. *Educational Review*, 65(3), 284–302. <https://doi.org/10.1080/00131911.2012.659657>
- Verger, P., Guagliardo, V., Gilbert, F., Rouillon, F., & Kovess-Masfety, V. (2009). Psychiatric disorders in students in six French universities: 12-month prevalence, comorbidity, impairment and help-seeking. *Social Psychiatry and Psychiatric Epidemiology*, 45(2), 189–199. <https://doi.org/10.1007/s00127-009-0055-z>
- Von Der Embse, N., Jester, D., Roy, D., & Post, J. (2017). Test anxiety effects, predictors, and correlates: A 30-year meta-analytic review. *Journal of Affective Disorders*, 227, 483–493. <https://doi.org/10.1016/j.jad.2017.11.048>
- Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71(1), 3–25. <https://doi.org/10.1037/0022-0663.71.1.3>
- Yusoff, M. S. B., Hadie, S. N. H., & Yasin, M. a. M. (2021). The roles of emotional intelligence, neuroticism, and academic stress on the relationship between psychological distress and burnout in medical students. *BMC Medical Education*, 21(1). <https://doi.org/10.1186/s12909-021-02733-5>
- Zahed-Babelan, A., & Moenikia, M. (2010). The role of emotional intelligence in predicting students' academic achievement in distance education system. *Procedia - Social and Behavioral Sciences*, 2(2), 1158–1163. <https://doi.org/10.1016/j.sbspro.2010.03.164>