

An analysis of grade-based emotional intelligence among Iranian senior high school EFL learners

Pardis Elahi^a, Islamic Azad University, Fars Province, Kazerun, Balwar Millat, MJ33+J44, Iran

Ali Panah Dehghani^{b1}, Islamic Azad University, Fars Province, Kazerun, Balwar Millat, MJ33+J44, Iran,
alidehghani35@gmail.com

Ghasem Tayyebi^c, Islamic Azad University, Fars Province, Kazerun, Balwar Millat, MJ33+J44, Iran

Suggested Citation:

Elahi, P., Dehghani, A.P. & Tayyebi, G. (2025). An analysis of grade-based emotional intelligence among Iranian senior high school EFL learners. *Contemporary Educational Research Journal*, 15(4), 177-185.
<https://doi.org/10.18844/cerj.v15i4.9561>

Received from March 18, 2025; revised from June 17, 2025; accepted from October 1, 2025.

Selection and peer review under the responsibility of Assoc. Prof. Dr. Deniz Ozcan, Samsun Ondokuz Mayıs University, Türkiye.

©2025 by the authors. Licensee *United World Innovation Research and Publishing Center*, North Nicosia, Cyprus. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

©iThenticate Similarity Rate: 8%

Abstract

Emotional intelligence has gained increasing attention in educational research due to its influence on learning outcomes and interpersonal relationships. However, limited evidence exists regarding its development across educational stages among learners of English as a foreign language. This study examined the overall emotional intelligence of senior high school students and explored possible variations across grade levels. A total of 156 participants took part in the investigation. Data were collected using the Self-Report Emotional Intelligence Test to assess learners' emotional understanding, regulation, and expression. The study employed descriptive and inferential analyses to evaluate differences in emotional intelligence among students in different grades. Findings revealed that participants generally demonstrated a moderate level of emotional intelligence and that emotional intelligence remained relatively consistent across grades. These results suggest that students at the senior secondary level share comparable stages of emotional development. The study highlights the need for educational programs that nurture emotional skills alongside linguistic competence to promote holistic learner development.

Keywords: Emotional development; emotional intelligence; English learners; grade level; self-report assessment.

* ADDRESS FOR CORRESPONDENCE: Ali Panah Dehghani, Islamic Azad University, Fars Province, Kazerun, Balwar Millat, MJ33+J44, Iran
E-mail address: alidehghani35@gmail.com

1. INTRODUCTION

Emotion is a psychological state that encourages a person to take action in response to a stimulus. Emotions have complex consequences, often leading to significant activity and behavioral shifts that can cause tension and stress in unfamiliar environments (HM, 2016). In other words, emotion is an affective psychological phase that drives a person to act following a stimulus, resulting in changes in behavior or feelings. Intelligence is an intrinsic tendency that helps humans think rationally and respond to various situations (Moshahid, 2017; Martínez-Rodríguez & Ferreira, 2025).

One of the main factors that affects humans' cognitive processes and, ultimately, learning is the significant role of emotion. In addition to being more motivated, individuals who are in a better emotional state and can manage their emotions also learn more easily. According to Hammond et al. (2012), emotions can inadvertently interfere with our data processing abilities and also facilitate the understanding of complex concepts, which require considerable time and energy. Ellison (2001) argues that emotions are constantly present in human beings throughout their lives in a dynamic way. These emotions are closely linked to intelligence and are responsible for shaping human behavior in different situations.

Emotional intelligence (EI) originates from two words: intelligence and emotion. Emotion is a relatively condensed, simultaneous evaluative physiological, behavioral, and subjective response that aims to cooperate, organize, and motivate; it influences learning and memory and regulates arousal in interactions with others (Dess, 2010). Intelligence can be interpreted as a person's actions carried out effectively to achieve a specific goal. In other words, intelligence involves taking actions to solve problems or create something to achieve a certain goal over a specific period. Emotional intelligence is an individual's intrinsic and extrinsic capability to control their feelings, establish sustained relationships, and motivate themselves to improve in every aspect of life (Zeidner et al., 2002; Jalala et al., 2020). A person with a high level of EI is characterized by the inherent capacity for skill, ability, or self-regulation to identify, process, evaluate, and manage their own emotions (Serrat, 2017).

Substantial evidence proves that being emotionally intelligent helps individuals excel through life transitions, from school to college, and later into the working world. Petrides et al. (2007) proposed EI as a combination of affective perceptions, motivations, and self-dispositions, sharing commonalities with major personality traits in various contexts. Some scholars suggest that EI encompasses both emic (self-regulation and understanding one's own emotions) and etic (empathy and responding to others' emotions) components, facilitating the navigation of daily human interactions and providing insights into simplifying human complexity (Ng and Earley, 2006; Sundararajan and Gopichandran, 2018).

Throughout the history of education, academic performance has primarily been assessed based on cognitive intelligence (Ritchie and Tucker-Drob, 2018). However, non-cognitive factors such as attitude, motivation, personality traits, self-efficacy, and social and emotional skills also play crucial roles in predicting academic outcomes (Gutman & Schoon, 2013). Thus, EI significantly contributes to academic success holistically; effective academic achievement encompasses not only high scores on achievement tests and grades but also the acquisition of applied skills and knowledge, personal development, and professional success (Cachia et al., 2018; Twum et al., 2025).

A meta-analysis by MacCann et al. (2020) of 158 studies from 27 countries found a moderate to small effect size between overall student EI and academic performance. The study hypothesized that embracing and controlling emotions are essential factors for academic success, beyond being intelligent and hardworking. However, a meta-analysis in the Iranian context of educational settings by Ranjbar et al. (2017) indicated a weak correlation between EI and academic success among Iranian EFL students, suggesting that a high emotional quotient does not necessarily lead to better performance in achievement tests. A case study by Owusu-Manu et al. (2019) assessed EI differences among 182 fourth-year undergraduate students in built environment courses at the Kwame Nkrumah University of Science and Technology, Ghana. The study utilized Emotional Quotient Inventory (EQ-I) questionnaires and found no significant difference in global EI across any fields of education. The highest EI score (160) was observed in construction technology management students,

followed by civil engineering students (156), quantity surveying and construction economics students (140), and architecture students (134).

Saud (2019) investigated the relationship between emotional intelligence and academic performance among 80 undergraduate English students in Saudi Arabia. Schutte et al.'s (1998) Self-Report Emotional Intelligence Test and an English Achievement Test were used to collect the data. The results indicated that EI had a positive effect on students' achievement levels. Significant differences between the EI subscales and English performance were detected in the statistical data analysis. In a cross-sectional study conducted at Chennai College, India, Sundararajan and Gopichandran (2018) used a Rapid Emotional Intelligence Self-Assessment Test on 207 medical students, showing an above-average EI. Similarly, Ravikumar et al. (2017) conducted a cross-sectional analytical study with 200 postgraduate medical students in Delhi, India, using the Schutte Self-Report Emotional Intelligence Test. Their findings showed high EI levels.

In sum, Emotional intelligence is considered a vital factor not only in school settings but also in the workplace and personal relationships over the last two decades (Elias et al., 2002). The field of teaching English as a second or foreign language (ESL/EFL) has entered a new realm in improving and adapting education. Besides the importance of focusing on the cognitive aspects of students, there is a necessity to explore their affective domains, which influence language learning and output.

1.1. Purpose of study

Emotional Intelligence, like IQ, can be directly measured. According to McPheat (2010), available literature suggests that there are mainly two ways to measure Emotional Intelligence Quotient (EQ): by self-report questionnaires and by performance. In most cases, the self-report questionnaire is used to measure EQ. The current study, however, aims to determine the emotional intelligence of Iranian senior high school EFL students and to assess their levels of emotional intelligence in grades 10 to 12 separately to explore any significant differences in this regard. Therefore, the following research questions were raised:

1. What is the overall emotional intelligence level of Iranian senior high school EFL learners?
2. Does emotional intelligence vary significantly among Iranian senior high school EFL learners from grades 10 to 12?

2. METHODS AND MATERIALS

2.1. Participants

A total of 156 participants (73 boys and 83 girls) were selected from upper secondary education (senior high school EFL learners), encompassing Grades 10 to 12, with ages ranging from 15 to 17. Out of the total population, fifty-five 10th-grade students (27 boys and 28 girls), fifty-one 11th-grade students (26 boys and 25 girls), and fifty 12th-grade students (20 boys and 30 girls) participated and completed the given questionnaire.

2.2. Data collection instrument

Emotional intelligence and emotional quotient are interchangeable terms used to understand, manage, and use emotions. For the purpose of the current study, Schutte et al.'s (1998) Self-Report Emotional Intelligence Test (SSEIT) was utilized to measure the emotional intelligence of the participants. According to Schutte et al. (1998), the development of their inventory was based on the emotional intelligence model by Salovey and Mayer (1990). Salovey and Mayer (1990), who first used the term emotional intelligence, claimed that it encompasses the following categories: "appraisal and expression of emotion, regulation of emotion, and utilization of emotions in solving problems" (p. 168).

The emotional intelligence scale of Schutte et al. (1998) has been widely used in emotional intelligence studies (Alston, 2009). The SSEIT is a 33-item self-report measure of emotional intelligence on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This inventory measures overall EI and is subcategorized into the aforementioned subscales: 1) appraisal and expression of emotions (13 items), 2)

regulation of emotions (10 items), and 3) utilization of emotions (10 items). The overall score range for this scale is from 33 (minimum) to 165 (maximum).

The administration of the SSEIT is straightforward, requiring 10-15 minutes to complete. The authors reported the internal consistency of the SSEIT, with a Cronbach's alpha of 0.90 for the 33-item scale. The internal consistency of the SSEIT was rechecked by the authors (Schutte et al., 1998), confirming a Cronbach's alpha of 0.87. For the purpose of the current study, however, the Persian validated version of the Schutte et al. (1998) Self-Report Emotional Intelligence Test (SSEIT) was employed. Through a pilot study, the reliability of the Persian version of the questionnaire was obtained ($r = 0.87$). The scoring procedure was conducted according to the instructions provided in the inventory.

2.3. Data analysis

All subjects participated under the guidance of one of the researchers to ensure equality in data collection. Respondents were given brief instructions on how to respond to the items to ensure they understood what was expected. They were also informed that the data would be stored anonymously. The SSEIT questionnaire was then distributed to the students of each class, grades 10 to 12, separately. The data were collected, and descriptive statistics were run to determine the overall EI of the participants. Additionally, to explore whether emotional intelligence varies among Iranian senior high school EFL learners from grades 10 to 12, the Kruskal-Wallis Test was conducted, and the results are provided below.

3. RESULTS

To identify the overall emotional intelligence level of Iranian senior high school EFL students, descriptive statistics were conducted.

Table 1

Descriptive statistics for the Iranian senior high school EFL learners' emotional intelligence

	N	Min.	Max.	Mean	Std. Deviation
Appraisal and exp. Of emotion	156	31.00	61.00	49.7244	5.61171
Regulation of emotion	156	21.00	48.00	39.7372	5.24879
Utilization of emotion	156	20.00	50.00	39.0962	4.63198
Emotional Intelligence	156	87.00	157.00	128.5256	13.30799
Valid N (listwise)	156				

The emotional intelligence assessment results presented in Table 1 show that the participants' overall emotional intelligence scores ranged from 87 to 157, with a mean score of 128.52 and a Standard Deviation (SD) of 13.30. According to Schutte et al. (1998), as cited in Veritas International Training Center (2020), the mean score across many large samples is approximately 124, with a standard deviation of about 13. Therefore, scores below 111 or above 137 are considered unusually low or high. Additionally, there are gender differences in performance on this test, with women scoring significantly higher (mean = 131) than men (mean = 125).

It can be inferred that the participants possessed a medium level of emotional intelligence, suggesting they have a moderate ability to perceive, utilize, manage, and regulate emotions in themselves and others. Furthermore, Table 1 shows that the sample's appraisal and expression of emotion scores ranged from 31 to 61, with a mean of 49.72 and an SD of 5.61, indicating a medium level of appraisal and expression of emotion. The sample population demonstrated a distribution of scores on the regulation of emotion with values ranging from 21 to 48. The mean score for this measure was 39.73, with an SD of 5.24. Additionally, the scores on the utilization of emotion spanned from 20 to 50, with a mean score of 39.09 and an SD of 4.63. The results demonstrated that the participants had high levels of regulation of emotion and a medium level of utilization of emotion.

The second research question aimed to determine if emotional intelligence varies among Iranian senior high school EFL learners from grades 10 to 12. First, the normality assumption was checked, revealing that the overall emotional intelligence scores did not meet the normality assumption. Therefore, the Kruskal-Wallis test, a non-parametric analysis, was conducted to explore potential differences in overall emotional

intelligence among the EFL learners in grades 10 to 12, as measured by the Self-Report Emotional Intelligence Test (SSEIT). Table 2, moreover, shows the descriptive statistics results, including means, standard deviations, and minimum and maximum scores for the emotional intelligence of the given groups of students.

Table 2

Descriptive statistics on emotional intelligence for grades 10 to 12

	N	Min.	Max.	Mean	Std. Deviation
Grade 10	55	95.00	157.00	127.0182	14.09950
Grade 11	51	87.00	150.00	126.4510	14.67421
Grade 12	50	108.00	156.00	132.3000	9.99234

As shown in Table 2, the EFL students in grade 12 obtained the highest mean score on the emotional intelligence test ($M = 132.30$, $SD = 9.99$), followed by the students in grade 10 ($M = 127.01$, $SD = 14.09$), and the EFL students in grade 11 ($M = 126.45$, $SD = 14.67$).

The results of the median scores are also presented in Table 3.

Table 3

Median values

Emotional Intelligence		
Grade	N	Median
10 th	55	131.0000
11 th	51	128.0000
12 th	50	133.0000
Total	156	131.0000

The median scores for students in 10th, 11th, and 12th grades were 131, 128, and 133, respectively.

Tables 4 and 5 summarize the mean rank and test statistics results, respectively.

Table 4

Mean ranks of the three groups' overall emotional intelligence scores

	Grade	N	Mean Rank
Emotional Intelligence	10th	55	73.85
	11th	51	71.32
	12th	50	90.94
	Total	156	

The results, shown in Table 4, indicated that the 12th-grade group (Mean rank = 90.94) obtained the highest overall ranking, followed by the 10th grade (Mean rank = 73.85), and the 11th grade (Mean rank = 71.32). To determine if the obtained means are significantly different, the Kruskal-Wallis Test was conducted, and the results are given in Table 5.

Table 5

Test statistics

	Emotional Intelligence
Kruskal-Wallis H	5.671
Df	2
Asymp. Sig.	.059

a. Kruskal-Wallis Test

The Kruskal-Wallis Test revealed that there was no significant difference in the overall emotional intelligence scores across the three different groups (10th, 11th, and 12th grade groups), (10th grade, $n = 55$, 11th grade, $n = 51$, and 12th grade, $n = 50$), $\chi^2 (2, n = 156) = 5.67$, $p = .059$.

4. DISCUSSION

The findings of the current study revealed that Iranian senior high school EFL learners possess a medium level of emotional intelligence, as evidenced by their overall emotional intelligence scores. Such a medium mean score indicates not only moderate emotional intelligence but also potential for enhanced social outcomes, as emotional intelligence has been linked to improved interpersonal relationships in various studies (Salovey & Sluyter, 1997; Schutte et al., 1998).

The specific components of emotional intelligence elucidated the participants' capabilities. Appraisal and Expression of Emotion pertain to the ability to recognize and understand one's own emotions and those of others based on situational and expressive cues that are culturally agreed upon. Concerning the appraisal and expression of emotion, the findings suggested that the participants demonstrated a medium level of ability in appraising and expressing their emotions effectively. These results reflect the participants' moderate ability to recognize and articulate their emotions. The moderate ability in this domain suggests that the EFL learners are likely to engage positively with peers and educators, facilitating a supportive learning environment that can enhance their educational experiences.

Regulation of Emotion refers to the ability to adaptively cope with conflicting or negative emotions using self-regulation methods, which improve the intensity or duration of such emotional states. It also includes the capability to create enjoyable conditions for others and to hide one's negative emotions to avoid harming the personal feelings of others. Utilization of Emotion refers to the ability to control emotions to facilitate various cognitive activities such as problem-solving, reasoning, and decision-making. People who effectively utilize their emotions can channel their feelings to enhance their thinking and performance.

The participants' scores on the regulation of emotion and the utilization of emotion components revealed that they exhibited high levels of regulation of emotion and a medium level of utilization of emotion, suggesting that they possess the ability to manage their emotions and utilize them to guide their thinking and behavior (Salovey & Sluyter, 1997). These results indicated that the participants are adept at managing their emotional responses and leveraging emotions to guide their decision-making processes. This is particularly relevant in the context of language learning, where emotional regulation can significantly impact motivation and persistence in overcoming challenges (Dörnyei, 2014). The moderate ability to utilize emotions effectively may also contribute to better engagement with the language learning process, as learners can harness their emotional experiences to enhance comprehension and retention.

The findings of the present study concerning the overall EI of the EFL high school students contradict those of previous research conducted in different cultural and educational contexts. For instance, Sundararajan and Gopichandran (2018) and Ravikumar et al. (2017) found that Indian medical students exhibited high levels of emotional intelligence. Okello and Aomo (2018), who conducted a study in the context of Kenya, also found that secondary school students were proficient in identifying their emotions.

The present study also aimed to investigate whether emotional intelligence varies among Iranian senior high school EFL learners from grades 10 to 12. The results of the Kruskal-Wallis test indicated that despite the differences in the mean ranks, there was no significant difference in the overall emotional intelligence scores among the three grade groups. The findings suggest that the emotional intelligence of senior high school EFL learners remains relatively consistent throughout their high school education, with no significant variations between the 10th, 11th, and 12th grade groups.

The finding that there was no significant difference in emotional intelligence scores among senior high school EFL learners across the three grade levels may be attributed to developmental factors and educational environments. Educational environment may play a significant role in shaping emotional intelligence (Zhang, 2023; Huseyin & Gönül, 2020). In high school settings, students are often exposed to similar curricula, teaching styles, and social dynamics, which may limit the variability in emotional intelligence across different grades.

Additionally, emotional intelligence is commonly believed to progress gradually over time, impacted by both cognitive maturation and social interactions (Brackett et al., 2011; Mayer et al., 2016; Mayer et al., 2004). However, it is possible that the developmental milestones associated with emotional intelligence do not align neatly with the high school grade levels examined in this study. For example, students in grades 10, 11, and

12 may be at similar stages of emotional development due to shared experiences, such as navigating adolescence, peer relationships, and academic pressures, which could obscure potential discrepancies in emotional intelligence that might manifest in diverse contexts or during other life stages.

5. CONCLUSIONS

The study concluded that Iranian senior high school EFL learners generally demonstrated a medium level of emotional intelligence, suggesting that while students possess moderate emotional awareness and regulation, there remains room for development in empathy, self-management, and interpersonal skills. The findings further indicated no significant differences in the overall emotional intelligence scores among the three grade levels, implying that students maintain a relatively stable level of emotional competency throughout their senior high school years. This consistency may reflect limited emphasis on emotional development within the EFL curriculum, highlighting the need for deliberate integration of socio-emotional learning within language education to complement cognitive and linguistic growth.

Emotional intelligence plays a vital role in fostering communication, cooperation, and resilience among language learners. In EFL contexts, emotionally intelligent students are better equipped to manage anxiety, sustain motivation, and engage meaningfully in collaborative learning activities. Therefore, educators should design classroom experiences that intentionally activate students' emotional abilities, such as through group projects, peer feedback, and role-playing tasks that encourage empathy and self-expression. By cultivating a supportive and emotionally responsive learning environment, teachers can enhance not only students' linguistic proficiency but also their interpersonal competence, leading to richer and more effective language learning outcomes.

Conflict of Interest: The authors declare no conflict of interest.

Ethical Approval: The study adheres to the ethical guidelines for conducting research.

Funding: This research received no external funding.

REFERENCES

- Alston, B. A. (2009). *An examination of the relationship between emotional intelligence and leadership practices*. Nova Southeastern University. <https://search.proquest.com/openview/0e7a174dad0a0fb04a9045c601b3aa42/1?pq-origsite=gscholar&cbl=18750>
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and personality psychology compass*, 5(1), 88-103. <https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/j.1751-9004.2010.00334.x>
- Cachia, M., Lynam, S., & Stock, R. (2018). Academic success: Is it just about the grades?. *Higher Education Pedagogies*, 3(1), 434-439. <https://www.tandfonline.com/doi/abs/10.1080/23752696.2018.1462096>
- Dess, N. (2010). Emotion: a unit lesson plan for high school psychology teachers. *Teachers of Psychology in Secondary Schools (TOPSS) of the American Psychological Association*.
- Dörnyei, Z. (2014). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge. <https://www.taylorfrancis.com/books/mono/10.4324/9781410613349/psychology-language-learner-zolt%C3%A1n-d%C3%B6rnyei>
- Elias, M. J., Arnold, H., & Hussey, C. S. (Eds.). (2002). *EQ+ IQ= Best leadership practices for caring and successful schools*. Corwin Press.
- Ellison, L. (2001). *The personal intelligences: Promoting social and emotional learning*. Corwin Press. [https://books.google.com/books?hl=en&lr=&id=QMoZkY2OhzIC&oi=fnd&pg=PR8&dq=Ellison,+L.+\(2001\).+The+Personal+Intelligences:+Promoting+Social+and+Emotional+Learning.+USA:+Thousand+Oaks,+California,+Corwin+Press,+Inc.&ots=S9QlHkxnm&sig=pg9-mf26MZqDWTkS-iyJfd5HS9c](https://books.google.com/books?hl=en&lr=&id=QMoZkY2OhzIC&oi=fnd&pg=PR8&dq=Ellison,+L.+(2001).+The+Personal+Intelligences:+Promoting+Social+and+Emotional+Learning.+USA:+Thousand+Oaks,+California,+Corwin+Press,+Inc.&ots=S9QlHkxnm&sig=pg9-mf26MZqDWTkS-iyJfd5HS9c)

- Gutman, L. M., & Schoon, I. (2013). The impact of non-cognitive skills on outcomes for young people. A literature review. <https://discovery.ucl.ac.uk/id/eprint/10125763/>
- Hammond, L. D., Orcutt, S., Stroble, K., Kirsch, E. I., Martin, D., & Comer, J. (2012). Feelings count: Emotions and learning. *Journal of Educational Psychology*, 45 (3), 123-145. http://www.learner.org/courses/learningclassroom/support/05_emotions_learning.pdf
- HM, E. M. (2016). Managing Emotional Intelligence. *Tadrib*, 2(2), 1-16.
- Huseyin, U., & Gönül, A. (2020). A content and citation analysis of the studies on learning environments and special education. *International Journal of Cognitive Research in Science, Engineering and Education*, 8(2), 95-104. <https://cyberleninka.ru/article/n/a-content-and-citation-analysis-of-the-studies-on-learning-environments-and-special-education>
- Jalala, S. S., Latifoğlu, G., & Uzunboyu, H. (2020). Strength-based approach for building resilience in school children: The case of Gaza. *Anales de Psicología/Annals of Psychology*, 36(1), 1-11.
- MacCann, C., Jiang, Y., Brown, L. E., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological bulletin*, 146(2), 150. <https://psycnet.apa.org/fulltext/2019-74947-001.html>
- Martínez-Rodríguez, A., & Ferreira, C. (2025). Factors influencing the development of emotional intelligence in university students. *Eur J Psychol Educ*, 40, 60. <https://doi.org/10.1007/s10212-025-00956-4>
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion review*, 8(4), 290-300. <https://journals.sagepub.com/doi/abs/10.1177/1754073916639667>
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). TARGET ARTICLES:" emotional intelligence: theory, findings, and implications". *Psychological inquiry*, 15(3), 197-215. https://www.tandfonline.com/doi/abs/10.1207/s15327965pli1503_02
- McPheat, S. (2010). *Emotional intelligence*. Telluride, CO: Ventus Publishing
- Moshahid, M. (2017). A comparative study of emotional intelligence among management and engineering students. *International Journal of Academic Research and Development*. Volume, 2, 716-720. <https://allreviewjournal.com/assets/archives/2017/vol2issue4/2-5-87-985.pdf>
- Ng, K. Y., & Earley, P. C. (2006). Culture+ intelligence: Old constructs, new frontiers. *Group & Organization Management*, 31(1), 4-19. <https://journals.sagepub.com/doi/abs/10.1177/1059601105275251>
- Okello, L. M., & Aomo, J. A. (2018). Relationship between emotional intelligence and suicidal behaviour among secondary school students in Kitutu Central Sub-County, Kisii County, Kenya. <https://journalissues.org/ijeprr/wp-content/uploads/2018/07/Okello-and-Aomo-1.pdf>
- Owusu-Manu, D., Edwards, D. J., Kukah, A. S., Pärn, E. A., El-Gohary, H., & Aigbavboa, C. (2019). An assessment of the level of emotional intelligence attributes of undergraduate built environment students in developing countries. *Industry and Higher Education*, 33(2), 108-115. <https://journals.sagepub.com/doi/abs/10.1177/0950422218798551>
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British journal of psychology*, 98(2), 273-289. <https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/000712606X120618>
- Ranjbar, H., Khademi, S. H., & Areshtanab, H. N. (2017). The relation between academic achievement & emotional intelligence in Iranian students: A meta-analysis. *Acta facultatis medicae Naissensis*, 34(1), 65-76. https://www.academia.edu/download/106609189/1561281781_9631-etarjome-English.pdf
- Ravikumar, R., Rajoura, O. P., Sharma, R., Bhatia, M. S., & Bhatia Sr, M. S. (2017). A study of emotional intelligence among postgraduate medical students in Delhi. *Cureus*, 9(1). <https://www.cureus.com/articles/5583-a-study-of-emotional-intelligence-among-postgraduate-medical-students-in-delhi.pdf>
- Ritchie, S. J., & Tucker-Drob, E. M. (2018). How much does education improve intelligence? A meta-analysis. *Psychological Science*, 29(8), 1358-1369. <https://journals.sagepub.com/doi/abs/10.1177/0956797618774253>
- Salovey, P. E., & Sluyter, D. J. (1997). *Emotional development and emotional intelligence: Educational implications*. Basic Books. <https://psycnet.apa.org/record/1997-08644-000>

Elahi, P., Dehghani, A.P. & Tayyebi, G. (2025). An analysis of grade-based emotional intelligence among Iranian senior high school EFL learners. *Contemporary Educational Research Journal*, 15(4), 177-185. <https://doi.org/10.18844/cerj.v15i4.9561>

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185-211. <https://journals.sagepub.com/doi/abs/10.2190/DUGG-P24E-52WK-6CDG>

Saud, W. I. (2019). Emotional Intelligence and Its Relationship to Academic Performance among Saudi EFL Undergraduates. *International journal of higher education*, 8(6), 222-230. <https://eric.ed.gov/?id=EJ1233774>

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and individual differences*, 25(2), 167-177. <https://www.sciencedirect.com/science/article/pii/S0191886998000014>

Serrat, O. (2017). Understanding and developing emotional intelligence. In *Knowledge solutions: Tools, methods, and approaches to drive organizational performance* (pp. 329-339). Singapore: Springer Singapore. https://link.springer.com/chapter/10.1007/978-981-10-0983-9_37

Sundararajan, S., & Gopichandran, V. (2018). Emotional intelligence among medical students: a mixed methods study from Chennai, India. *BMC Medical Education*, 18(1), 97. <https://link.springer.com/article/10.1186/s12909-018-1213-3>

Twum, K. K., Kwakwa, P. A., Hinson, R. E., Yeboah, C. O. A., & Korang-Yeboah, B. (2025). Emotional intelligence, student trust, and student satisfaction in higher education institutions. *SN Social Sciences*, 5(7), 79. <https://link.springer.com/article/10.1007/s43545-025-01117-6>

Veritas International Training Center (2020). The Schutte Self-Report Emotional Intelligence Test. <https://www.veritas-itc.com/wp-content/uploads/2020/12/The-Schutte-Self-Report-Emotional-Intelligence-Test.pdf>

Zeidner, M., Roberts, R. D., & Matthews, G. (2002). Can emotional intelligence be schooled? A critical review. *Educational psychologist*, 37(4), 215-231. https://www.tandfonline.com/doi/abs/10.1207/S15326985EP3704_2

Zhang, C. (2023). The Effects of Emotional Intelligence on Students' Foreign Language Speaking: A Narrative Exploration in China's Universities. *Qualitative Report*, 28(12). <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10520147&AN=174172919&h=L%2BWz7nm2Y3lZlRdgy2R%2FMgkiOjAfuMH7trSgGYNn7h6jclWeclUJfeef69zbnrGLuXcq%2BiNkOeEQ8ddBkLayg%3D%3D&crl=c>