

The Correlation Between Emotional Intelligence and Academic Performance in Undergraduate Students

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ABSTRACT

A cross-sectional correlational study conducted in Kohat University of Science & Technology investigated the association between emotional intelligence, the capability of an individual to effectively perceive, understand, manage, and utilize his or her own emotions, and academic performance in terms of Cumulative Grade Point Average. The Emotional Intelligence Scale was employed to collect participants' level of intelligence in the 11 sub-dimensions, and statistical tools such as multiple linear regression and Pearson's product-moment correlation were used to assess the relationship between the two variables. Findings reveal that there is an overall positive correlation between all sub-dimensions of emotional intelligence and success among undergraduates, though the strength of the correlation varies. Several sub-dimensions have also been shown to predict academic success of undergraduates. Likewise, in another study that measured the relationship between emotional intelligence and job burnout, it was found that an increase in emotional intelligence is directly related to decreased job stress for hospital staff. Overall, research shows that emotional intelligence has a positive influence on life success and is beneficial for excelling in schools and the workplace. Hence, emotional intelligence training should be integrated into the school curriculum at each level to produce emotionally academically competent students. Training students how to understand and manage their own and others' emotions will prepare them for future career success.

Topic Introduction

Emotional Intelligence, also known as emotional quotient or EIQ, is the ability to effectively perceive, understand, manage, and use emotions in ways that foster positive communication and overcoming challenges (Segal, 2021). Individuals with high emotional intelligence are sensitive and aware of their own and others' emotions—both positive and negative, and strong or subtle ones (Houston, 2022). Individuals with high emotional intelligence understand the emotional needs and concerns of others, how to communicate with others, and how to resolve conflict. Thus, emotional intelligence helps individuals build strong interpersonal connections (Petrovici, 2014). Additionally, high emotional intelligence is thought to translate into high work performance or productivity as these individuals are able to utilize their empathy skills in tasks such as problem solving, decision making, and critical thinking (Landry, 2019). Therefore, researchers hypothesize that the higher the level of emotional intelligence, the greater the academic success.

Significance

Today, emotional intelligence abilities are considered as more accurate indicators of achievement in schools and workplaces than conventional measures of intelligence, such as IQ (Keyser, 2013). Hence, research in emotional intelligence allows researchers to derive the most useful and important emotional abilities for success in today's world (Suleman, 2019). Studying these emotional skills in these studies will reveal how emotional skills shape our lives and how invaluable certain emotional abilities are for thriving in life. Overall, this deepens the world's understanding of how humans' own competencies and characteristics directly influence their success and even benefit society at large. The information from emotional intelligence research could also direct the public's attention to the importance of fostering emotional abilities, not just analytical intelligence.

Method

This study uses cross-sectional correlational research to determine the relationship between emotional intelligence, measured using the Hyde, Pethe, and Dhar Emotional Intelligence Scale, and academic performance of undergraduates, measured by their Cumulative Grade Point Average (CGPA) (Suleman, 2019). A random sample of 186 students from the Kohat University of Science and Technology were enrolled into the study. To verify that the 10 items tested in the scale are reliable, researchers used Pearson's product-moment correlation and employed test-retest reliability to determine the correlation coefficient between the participants' score of the first test and the score of the second test. After confirming the reliability of the scale, researchers began to measure the linear relationship between the two variables. Researchers derived the participants' score on each section of the test, which indicated the level of intelligence they have in that sub-dimension. Using the individual scores, researchers applied Pearson's product-moment correlation to determine the degree to which they correlated with the participants' CGPA. The relationships between each sub-dimension and academic success are indicated through scatterplots. Additionally, the research calculated "R-square" to measure the relative contribution of emotion intelligence to the variance in academic performance. After calculating how well the overall emotional intelligence links with academic achievement, they performed multiple linear regression to deduce the extent to which each sub-dimension predicts academic excellence (Suleman, 2019).

Results

Researchers found a strong positive correlation between three particular dimensions in emotional intelligence and academic success: managing relations ($r = 0.720$), integrity ($r = 0.719$), and self-development ($r = 0.808$) (Suleman, 2019). There is a moderate positive correlation between the rest of the 7 dimensions of emotional intelligence and academic success: self-awareness ($r = 0.646$), empathy ($r = 0.617$), self-motivation ($r = 0.688$), emotional stability ($r = 0.696$), value orientation ($r = 0.663$), commitment ($r = 0.672$), and altruistic behavior ($r = 0.656$). In the study, the value of R square is 0.801, which indicates that 80% of the variance in academic performance is accounted for by emotional intelligence. Among the subdimensions, self-development (Beta = 0.296) was found the strongest predictor of academic success, followed by emotional stability (Beta = 0.197), managing relations (Beta = 0.170), altruistic behavior (Beta = 0.145), and commitment (Beta = 0.117) in defining academic success positively. Dimensions that have no significant positive effect on academic success include self awareness (Beta = 0.041), value orientation (Beta = -0.031), empathy (Beta = 0.035), self-motivation (Beta = 0.047), integrity (Beta = 0.092) and value orientation (Beta = 0.043) (Suleman, 2019).

Patterns and Trends

Likewise, in another research study conducted to study the correlation between emotional intelligence and job stress, researchers concluded that emotional intelligence is a direct influencing factor on overall success (Han

et al., 2022). The researchers in the corresponding study also found that emotional stability played a key role in being a predictor of success. Emotional stability was seen to be one of the factors in determining an undergraduate's academic performance, whereas for general hospital staff, limiting interaction between staff and other patients increased emotional stability, which in turn decreased emotional suppression. Furthermore, both research studies have comparable approaches to their research methods, as both utilized a similar correlational cross-sectional design. Researchers of both studies gave additional generalizability to each of the studies by examining emotional intelligence in different departments of academics or a hospital. Altogether, evidence from both studies led to a single conclusion: having high emotional intelligence is closely linked with thriving and excelling in society.

Application

By highlighting the importance of certain emotional skills for academic achievement, this study could lead to the development of K-12 educational programs that teach children how to effectively understand, regulate, and express emotions. The incorporation of emotional intelligence training in the school curriculum, which will teach children how to make decisions and maintain relationships, has shown to prevent many later behavioral problems among students and significantly improve learning outcomes (Cherry, 2020). Cultivating such emotional capabilities will help students properly handle challenges and create a nurturing learning space that will drive students to achieve personal goals (Ma, 2020). Overall, teaching students these valuable competencies make them more adept at succeeding academically and socially, setting the stage for gainful employment and future independence.

Relevance

The study of emotional intelligence in success and life satisfaction allows psychologists to understand how the ability to effectively utilize emotions in different situations contributes to individual growth, creativity, and overall behavior (Goleman, 2019). Its role as an indicator of an individual's ability to perceive, understand, manage, and use their emotions allows for psychologists to have a greater understanding of competence in society (Petrovici, 2014). Additionally, research in emotional intelligence expands upon the current understanding of our thought and decision pathway, namely the cognitive perspective of psychology (Checa, 2019). Furthermore, studying emotional intelligence has aided in the diagnosis and treatment of mental and behavioral disorders (Moeller, 2020). By acting as a tool to measure deficits in the ability to regulate and understand emotions, emotional intelligence has allowed clinical psychologists to detect borderline personality disorder and major depressive disorder at an early stage (Schutz, 2012). The research also allows psychologists to develop humanistic psychotherapies in which they help clients grow emotionally towards the goals of self-actualization and personal fulfillment (Ackerman, 2022). Overall, it enables the facilitation of advancements in psychology fields regarding public mental health.

Conclusion

Conclusively, the findings from this study confirmed researchers' hypothesis that there is a significant positive correlation between emotional intelligence and academic success in undergraduate students. Though the

strength of the correlation—strong, moderate, low—varies among each sub-dimension of emotional intelligence, the evidence shows that the higher the level of intelligence in any particular emotional skill, the higher the academic achievement. In addition, several sub-dimensions were found to be significant predictors of academic excellence, with self-development shown to be the strongest predictor. Though not all sub-dimensions have a substantial effect on academic success, as a whole, emotional intelligence has a strong positive influence on academic performance. Another study measuring the relationship between emotional intelligence and job stress also found that possessing emotional abilities is beneficial to thriving in the workplace, emphasizing that emotional intelligence has a positive influence on overall life success.

Limitations

Various methodological elements in this research could have influenced the results and interpretation of these findings (Suleman, 2019). Firstly, different demographic factors, such as age, parental education, family income level, the academic semester, were not considered in the study, but could serve as confounding variables between a person's emotional intelligence and CGPA. This distorted the true relationship between the two variables and likely impacted the true influence of emotional intelligence on CGPA. Secondly, CGPA was the only tool used to measure academic success, and it does not consider the rigor level of the classes taken by each individual student, given that all classes at colleges are on a 4.0 scale regardless of difficulty. Therefore, using CGPA as the sole measure could lead to a slightly misleading relationship between the two variables. Employing other robust measurements of academic success such as standardized achievement or aptitude tests in the study could have increased the accuracy of the relationship. Lastly, the study was conducted only in one public university in Khyber Pakhtunkhwa, thereby limiting the generalizability of the results to all undergraduates. Results of this study may marginally differ if the same study was conducted in another university, considering factors such as whether the school uses grade inflation and the academic rigor of the school. All these inadequacies may have altered the true predictive relationship between emotional intelligence and academic success and slightly distorted the reliability of the findings.

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