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Research Article

The Role of Emotional Intelligence in Predicting Students' Academic Achievement in Online Learning

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ARTICLE INFO ABSTRACT

The study investigates the relationship between Emotional Intelligence (EI) and academic success amidst the COVID-19 pandemic's shift to online learning. Using a correlational research design, the study measures five EI components (selfawareness, self-management, motivation, empathy, and relationship management) and students' GPA during online learning. Findings reveal a significant positive correlation between EI and academic achievement. Notably, Relationship Management demonstrates the highest correlation with GPA, followed by empathy, self-awareness, and motivation, with self-management showing the least correlation. Regression analysis confirms self-awareness, empathy, and relationship management as robust predictors of GPA, while motivation and self-management lack statistical significance. This research contributes to bridging gaps in existing literature by exploring EI's predictive role in academic success within the pandemic-induced online learning context. The insights generated offer valuable implications for enhancing academic outcomes in online learning environments, guiding future strategies to optimize educational practices during and beyond the pandemic's challenges.

Keywords: Emotional Intelligence; Academic Achievement; Online Learning; GPA(Grade Point Average)

Introduction

Due to the emergence of the Internet, distance learning has been perceived as inadequate due to limitations of the accessibility of resources, such as direct communication with the professor and students, as well as the accessibility of learning materials located on campus (NCES, 2001). With new technologies supporting greater access to education, while also improving related communication, online learning has become exceedingly popular among non-traditional students (adult learners). Despite the increasing popularity and prevalence of online learning, retention remains problematic, with a significantly higher rate of attrition among online learners compared to traditional learners (Boston, Ice, & Gibson, 2011). Prior research has suggested that the sense of community developed through a traditional educational environment supports long-term positive associations, which in turn supports student commitment to the school community (Cooper, 1990; Dille & Mezack, 1991). In the traditional classroom setting, personal interactions support learning in which academic achievement is founded on the ability of the instructor to perceive student needs and non-verbal cues, appropriately modifying instruction, providing real-time, prompt feedback, and responses to questions. Comparatively, online instruction, which lacks face-to-face, personal interactions, relies on communicationbased primarily on written language, necessitating technological knowledge. Thus, students lack personal contact with the instructor and peers, which may decrease motivation and bring about feelings of isolation that can negatively impact student academic success in the online environment (Hill & Rivera, 2001). Although the flexibility in time and place of online learning programs is a considerable advantage for non-traditional students, online learning programs continue to face increasing concerns about student retention (Boston et al.,

2011). In addition to supporting the relationship between EI and academic success in online learning, research has also suggested EI as a means of supporting the development of transformational leadership behaviors (Harms & Crede, 2010; Lam & O'Higgins, 2012), which may specifically support greater success among business students.

Emotional Intelligence in Online Learning

The twenty-first century is known as the "age of globalization"; everything is changing, including the economy, education, culture, and technology, and humans must evolve with the times to live. Individuals need appropriate Intelligence Quotients (IQs), which are thought to account for a school or job performance, to be able to adjust and sustain this shift. Numerous researches define emotional intelligence in various ways—some even contradicting one another—and believe that it is a reliable indicator of success. According to Richards and Pryce, people with strong emotional intelligence are better able to manage stress, enhance performance, and lower employee turnover. Optimism, happiness, the capacity to adjust and change, and the ability to control intense emotions and stressful events without losing your mind are thus associated with emotional intelligence. Salovey and Mayer coined the term "emotional intelligence" (EI) in a publication of the same name in 1990. They were the ones who defined research on intelligence, social intelligence, and emotions. Based on their definitions, they came to the conclusion that emotional intelligence is a subset of social intelligence, which is the capacity of an individual to keep track of his own and other people's feelings, distinguish between them, and use that knowledge to inform decisions and behaviors. Put another way, emotional intelligence enables people to utilize their feelings to support arguments and to further their own thought processes. The two authors even established a model for EI using four branches to describe it viz Managing Emotions; Perceived Emotions; Facilitating thought using Emotions; Understanding Emotions.

The first category deals with how emotion is perceived through nonverbal cues. For many years, researchers have emphasized how emotional expression evolved as a social communication tool. The second category is the impact of emotions on our thought processes; in other words, our feelings influence our thoughts. Individuals' ability to reason becomes significant if they are able to comprehend emotions and the messages they convey. Lastly, having better emotional control will enable a person to create a more comfortable zone and develop their cognitive abilities. Later, Goleman Daniel and Reuven Bar-On developed further models for emotional intelligence, each with a somewhat different definition. Goleman's model, according to Wolff, is composed of four clusters: a. Self-awareness (the person's internal state, resources, preferences, etc.); b. Self-management, which consists of six competencies: emotional self-control, transparency, adaptability, achievement, initiative, and optimism; c. Social awareness, which consists of three competencies: empathy, organizational awareness, and service orientation; and d. Relationship management, which consists of six competencies: inspiring leadership, change catalyst, influence, teamwork and collaboration, and inspiring leadership. The five components of Bar-On's approach are stress management, interpersonal skills, self-expression, emotional selfawareness, and self-perception. Personality traits and emotional intelligence are closely related. Emotional intelligence is a mental skill that describes improving one's ability to think. As a result, emotional intelligence (EI) has been defined as the ability to pay attention to and distinguish between one's own and other people's emotions, to accurately recognize one's own and other people's emotions, to have emotional empathy, to control one's emotions or mood, to be highly motivated, to have good social and communication skills, to respond appropriately and adaptively to various situations in life, and, finally, to achieve a balance between one's home, school, job, and social life. Emotional intelligence, then, is a crucial personality characteristic that may have an impact on learning. Although there isn't much research on the topic of this paper that might highlight how EI affects e-learning or online learning, some studies about the relationship between online learning and EI are discussed in the second section of this study. Emotions and intelligence have come together to improve human capital as a result of recent major advancements in the fields of psychology and emotional intelligence (EI).

Characteristics of EI supporting Academic Achievement

Urquijo, I., & Extremera, N. (2017) findings showed that among the sample of 203 university students, emotional intelligence was positively correlated with academic satisfaction. Even after adjusting for sociodemographic and personality trait factors, the final model demonstrated complete mediation of academic engagement in the connection between academic satisfaction and emotional intelligence. An intensive meta-analysis study by MacCann et. al (2020) & Van Rooy and Viswevaran (2004) found significant evidence of generally positive associations of EI with school and work performances.

Research in the field of education has generally supported a relationship between the EI and student academic success (Swart, 1996; Van Rooy & Viswevaran, 2004); however, it is also noted that some research remains unclear on the relationship (Aalsma, 2004). Numerous assessment tools have been employed by various researchers examining emotional intelligence, yielding a range of outcomes. According to Zhoc et. al (2018) empirical findings, emotionally intelligent students are more self-directed and accomplish better academically

and generally, which raises their level of happiness with their university experience. Swart (1996) studied nearly 500 university students led by that used Bar-on's (1997) emotional quotient instrument (EQ-i). When comparing academically successful children to failing pupils, the results showed a significant increase in emotional intelligence, supporting a positive link between the variables. Similar to this, Singh et al. (2009) examined data from a random sample of 389 university students using the Self-Report Emotional Intelligence Test (SREIT) in conjunction with an adapted Visual, Aural, Read/Write, and Kinesthetic (VARK) instrument. They found a significant positive relationship between the EI and academic outcomes (GPA), as well as a positive relationship between learning styles and the GPA (as previously noted). Such a strong correlation between academic success and emotional intelligence has not been shown by other researchers. Aalsma (2004) used the Multifactor Emotional Intelligence Scale (Adolescent version) in a study of 39 gifted students, in contrast to the earlier research by Singh et al. (2009) and Swart (1996), and found no significant predictive contribution of the EI to student success, as measured by the GPA. Similarly, Johnson (2008) conducted a non-probability sample of 111 university students, both traditional and nontraditional, using the Mayer Salovey-Caruso emotional intelligence test. The results showed no significant difference in academic outcome (GPA) between the EI and learning style, nor any significant correlation between the two.

Review of Literature

Mayer and Salovey (1989) highlights that Emotions are perceived by us as structured reactions that transcend several psychological subsystems, such as the cognitive, motivational, physiological, and experiencing systems. An internal or external occurrence that has a good or negative valence meaning for the person usually causes emotions to surface. In general, emotions are psychological states that people exhibit in a variety of ways. In his book, Goleman (1995) asserts that IQ accounts for only 20% of an individual's achievement. This claim inspires many academics and researchers to look into and identify other factors that contribute an additional 80% of an individual's success. In addition to education, business, human relations, career development, leadership, industrial and organizational psychology, and many other fields have all benefited from the publication of Goleman's first book. A lot of people are interested in learning how a student's emotional intelligence, or EQ, might improve their academic performance and learning. Swart (1996) used Bar-on's (1997) emotional quotient assessment (EQ-i) to study over 500 typical university students. The variables were found to be positively correlated in the results, with academically successful students exhibiting significantly higher emotional intelligence than the unsuccessful ones.

On the other side, emotional intelligence describes the capacity to recognize, understand, and control one's own emotions as well as those of others. Jerabek (1998) claims that while assessing an individual's emotional intelligence, a few criteria are considered in addition to the intelligence itself. Emotional intelligence (EI) is the capacity to effectively identify one's own wants and feelings as well as those of others in the context of the social context. It also involves integrating these needs and feelings with one's own long-term goals. Meany (2000), highlighted that students become entangled in emotional upheaval and a variety of issues that have a direct impact on their performance and mental stability because of the university's and society's overall lack of awareness of emotional intelligence in higher education. This body of research, which examines academic achievement and emotional intelligence using students' GPAs as an outcome metric, is spot-on. The idea of emotional intelligence (EI) as a predictor of performance in the online environment has not received much attention, despite its contributions to success in other contexts (Imel, 2003).

According to Mayer, Salovey, and Caruso (2004), people with high EQs (emotional quotient) are more adapt at controlling their emotions and relating to other people. People with strong emotional intelligence (EQ) may address emotional difficulties with little cognitive effort. People who have high EQ tend to avoid unpleasant actions and be less damaging. These people may also have a stronger sense of family and a greater drive to accomplish their objectives in life. Van Rooy and Viswevaran (2004) found significant evidence of generally positive associations of the EI with school and work performances in their intensive meta-analysis of Emotional Intelligence Predicting Academic Performance using 29 studies. Their meta-analysis revealed that various aspects of emotional intelligence have varying degrees of significance for academic achievement. The three components of EI that have nontrivial incremental validity-mixed EI, emotion management ability, and emotion understanding ability—appears to be the only areas where applicable applications of EI in education are possible. According to the study's findings, "academic performance is most likely predicted by different pathways for the different varieties of EI." The results of Tajularipin and Rohaizan's (2009) study, which looked at the emotional intelligence levels of 223 Form One and Form Four pupils in rural locations, corroborate the idea that emotional intelligence has an impact on academic achievement. They discovered a strong correlation between students' academic success and emotional intelligence, which they said is consistent with research by Parker et al. and Petrides et al. Similar to this, Singh et al. (2009) examined data from a random sample of 389 university students using the Self-Report Emotional Intelligence Test (SREIT) in conjunction with an adapted Visual, Aural, Read/Write, and Kinesthetic (VARK) instrument. They found a significant positive relationship between the EI and academic outcomes (GPA).

Mohzan, M. A. M., Hassan, N., & Abd Halil, N. (2013) states that in addition to supporting academic success, a person with high emotional intelligence is thought to function well at work for reasons such being able to

work under pressure, collaborate with others, and increase productivity within the company. It is getting more and more obvious that businesses nowadays are looking for workers who can assess a situation and control their emotions to make a logical decision rather than those who only care about their grades.

According to Zhoc et. al. (2020), Emotional Intelligence positively predicted every aspect of student engagement and supported important learning outcomes (such as GPA, generic learning outcomes, and students' happiness with the institution). According to Ana Costa and Luísa Faria's (2014) findings, the students' academic accomplishment level could influence their EI level in the future years, in addition to the EI factors being able to predict students' achievement. Overall, the results indicate that EI factors have a stronger predictive value over students' GPA than do grades in Portuguese and Mathematics. This suggests that GPA is a more representative measure of a student's achievement because it considers their performance in a variety of subjects. According to the findings of Maguire et. al (2017) & Rashmi et. al (2016), emotional intelligence is significantly correlated with university adjustment but may not directly affect GPA in university. Therefore, it is plausible to conclude that university adjustment acts as a mediating factor in the relationship between emotional intelligence and GPA. These findings suggest that positive emotion, motivation, adaptability, and cognitive capacity all play a role in creating a learning environment and career adaptability (Celik & Storme, 2018).

The abrupt lockout has disrupted schooling, which has negatively impacted kids' personal, emotional, social, and economical well-being as well as made life extremely difficult for educators, students, and their families (Y Chandra, 2020). The COVID-19 Pandemic has affected the lives of millions including the education of students being high schoolers of university goers. For the past 2 years, students have been a subject of online learning which has shown a peak growth due to the Pandemic. Emotional intelligence is necessary for both psychological health and academic success (Dimitrijevic et. al, 2018).

Based on the discussion, it is indicated that there is a positive impact of Emotional Intelligence on Academic Achievement. Being given a natural online learning environment with the support of educational institutions, the study analyze the impact of Emotional Intelligence on students' Academic Achievement in the online learning environment. Studies previously have been conducted in online learning but the nature of these online learning has been forced due to the COVID-19 and the lack of relevant research in the field framed the rationale to conduct this study.

Objectives of the Study

from making things extremely difficult for educational institutions, teachers, students, and their families, the abrupt lockdown has disrupted education and had a detrimental effect on the personal, emotional, social, and financial well-being of those involved.

- The purpose of the study was to examine the relationships between the variables of EI and academic success, using the GPA, in an online learning setting.
- In light of the COVID-19 Pandemic, how much does a student's emotional intelligence—as determined by their self-awareness, self-management, motivation, empathy, and relationship management—explain academic achievement in online learning.

Research Design

A correlational research design was selected to examine the relationship between the study's four independent variables and the outcome measure. When the variables are continuous, a correlational design can be used to determine the linear relationship between the variables. The following **null hypothesis** was tested:

Ho: Emotional Intelligence as measured by Self-awareness, Self-management, Motivation, Empathy, and Relationship Management does not explain academic success in online learning.

Participants

The Statistical population involved students that were taking online classes and were involved in online learning during the COVID-19 Pandemic in the 2020-21 academic year. Sample size – 128 undergraduate students.

Research Instrument

A two-part questionnaire was used to collect the data and measure the variables of interest. To measure emotional intelligence, the **Practical EQ Emotional Intelligence Questionnaire** – **2013** was used. It is based on the five-competency model of emotional intelligence by Daniel Goleman in the book Emotional Intelligence (1995). The EI questionnaire is designed to measure 5 emotional skills, which reflect levels of emotional intelligence. The 5 emotional skills include Self-awareness, self-management, Motivation, Empathy, and Relationship Management. Responses to the items are given on a 5-point Likert scale (1-Almost Never, 2-Rarely, 3- Sometimes, 4-Usually, 5- Almost Always)

The second part was designed to gather data on the outcome measure, the GPA secured during the online learning period, and selected demographic characteristics (i.e., age, gender, educational qualification) of the respondents to describe the sample.

The data collected online were exported into Microsoft Excel which was used for data analysis. Descriptive statistics were used to summarize and organize the data. The Correlation Coefficient was used to measure the strength of the relationship between the two variables that were GPA (obtained during offline learning) and Emotional Intelligence Predictor Variables. The values range between -1.0 and 1.0. A correlation of -1.0 shows a perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation. Further, data was analyzed using the Regression Analysis to explain the variation in the GPA.

Analysis and Interpretation

The purpose of the study was to examine the relationship between emotional intelligence and academic achievement. To accomplish this goal, a correlational study was conducted. The research question that served as the study's compass is How much does a student's emotional intelligence—as determined by their abilities in self-awareness, self-management, motivation, empathy, and relationship management—account for their academic achievement in an online learning environment?

Descriptive Analysis

Description of the Sample - The sample consisted of 128 undergraduate and postgraduate students, which were undergoing online classes or online learning during the COVID-19 by their universities/colleges. 54% male and 45% female students constitute the sample for the study. For educational qualifications, it was noted Undergraduates (87%) were the highest followed by High School goers (4%), post-graduates (7%), and Self-Employed people (2%)

The Predictor Variables

The means of the respondent's responses to the **25 questions** of the Emotional Intelligence Questionnaire were used to rank the items from the highest to the lowest.

The raw data were used to compute the main 5 competencies of Emotional Intelligence.

Ranking of the Emotional Skills Items, n = 128

ITEM	MEAN
I feel excited when I think of my goals:	3.835938
I understood the feedback that others gave me:	3.703125
My career is moving in the right direction:	3.5625
I get on well with each of my work colleagues:	3.484375
I find it easy to "read" other people's emotions:	3.4375
I am clear about my goals for the future:	3.429688
I achieve win/win outcomes:	3.429688
I am comfortable talking to anyone:	3.421875
I can explain my actions:	3.398438
I act consistently to move towards my goals:	3.398438
I encounter difficult people:	3.265625
Things that happen in my life make sense to me:	3.242188
I can describe accurately what I am feeling:	3.179688
People choose to work with me in preference to equally talented colleagues:	3.164063
I find it hard to maintain my enthusiasm when I encounter setbacks:	3.117188
I can stay calm, even in difficult circumstances:	3.09375
I get irritated by things, other people or myself:	3.054688

I feel miserable:	3.039063
I get impatient with incompetent people:	2.976563
Other people don't see me as I see myself:	2.96875
I feel uncomfortable when other people get emotional:	2.914063
It's unpredictable how my colleagues will feel in any given situation:	2.867188
I am prone to outbursts of rage:	2.84375
My colleagues are uncommunicative:	2.835938
I get carried away and do things I regret:	2.804688

Table 1- Ranking of EI questions *1-Almost Never, 2-Rarely, 3-Sometimes, 4-Usually, 5- Almost Always

The Emotional Intelligence Questionnaire was used to measure five emotional intelligence competencies, namely, Self-awareness, Self-management, Motivation, Empathy, and Relationship Management. Standard deviation measures the spread of data distribution. The more spread out a data distribution is, the greater its standard deviation. A standard deviation close to 0 indicates that the data points tend to be close to the mean. The further the data points are from the mean, the greater the standard deviation.

The mean scores were used to rank the skills from the lowest to the highest. The results indicated that Motivation was endorsed the most, followed by Self-awareness, Relationship Management, Empathy, and lastly Self-management.

Competency	No. questions	Mean	S. D
Self-management	5	2.967188	0.97653
Motivation	5	3.157813	1.037858
Empathy	5	3.201563	1.010152
Self awareness	5	3.298438	1.078192
Relationship management	5	3.46875	1.00078

Table 2- Mean scores and Standard Deviation of predictor variables of EI *1-Almost Never, 2-Rarely, 3-Sometimes, 4-Usually, 5- Almost Always

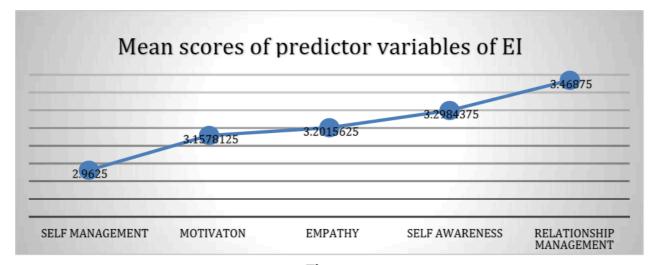


Figure 1

According to the graph, Relationship Management has the highest mean score (3.46) for the emotional intelligence component, while Self-Management has the lowest mean score (2.96), based on five values.

Correlation Analysis

The *Pearson Correlation Coefficient* was used to determine the direction and magnitude of the associations between each of the five emotional intelligence competencies, the predictor variables (Self-awareness, Self-management, Motivation, Empathy, and Relationship Management), and the GPA, the outcome measure.

Competency	Pearson Correlation	p-value (1% Significant level)
Relationship management	0.24	< .01
Empathy	0.22	< .01
Self awareness	0.22	< .01
Motivation	0.21	< .01
Self management	0.01	< .01

Table 3 - Correlation Coefficients of Predictor Variables of EI

Relationship Management competency is having the highest correlation with GPA, followed by Empathy, Self-Awareness, Motivation, and lastly Self-Management.

The overall Correlation Coefficient was calculated at 0.36 which indicated a moderate positive correlation between the predictor variables of Self-awareness, Self-management, Motivation, Empathy, and Relationship Management), and the GPA, the outcome measure.

This further indicates that our Null Hypothesis is wrong and there exists a moderate yet positive relationship between Emotional Intelligence and GPA that was used to measure academic achievement in the online education model.

Regression Analysis

To determine the influential components of emotional intelligence in predicting academic achievement, regression analysis was used. Regression allows you to investigate the relationship between variables. But more than that, it allows you to model the relationship between variables, which enables you to make predictions about what one variable will do based on the scores of some other variables. It is specifically designed to develop regressions models with one dependent variable and multiple independent variables which in our case is

X (Independent Variable) – Emotional Intelligence Predictor Variables

Y (Dependent Variable) - GPA, the outcome measure for academic achievement

After running the first Regression Analysis on our data we get the following results -

Multiple R	0.39
R Square	0.16
Adjusted R Square	0.12
Standard Error	0.87
Observations	128.00

Table 4- Regression Statistics

	df	SS	MS	F	Significance F
Regression	5.00	17.00	3.40	4.48	0.00
Residual	122.00	92.61	0.76		
Total	127.00	109.61			

Table 5- ANNOVA

	Coefficients	Standard Error	t Stat	P-value (sig 5%)
Intercept	4.58	0.94	4.85	0.00*
Self awareness	0.32	0.14	2.32	0.02*
Self management	0.06	0.16	0.35	0.73
Motivation	0.12	0.14	0.88	0.38
Empathy	0.27	0.18	1.51	0.13
Relationship management	0.45	0.16	2.85	0.01*

Table 6- P-values

As it can be seen from the data that \mathbf{R} Square = $\mathbf{0.16}$ which indicates that 16% of the variation of y (GPA) is explained by the regressors of our five Independent Variables.

An adjusted R Square of 0.12 means our regression model can explain around 12% of the variation of the dependent variable Y (GPA) around the average value of the observations. In other words, 12% of the variability in y (our dependent variable predictions) is captured by our model.

In the present study, the p-values that are greater than our significance level of 0.05 stands statistically insignificant to our data. The Regression Model is to run again to get the predictors that are statistically significant for our dependent variable. The predictor variables that are statistically insignificant in our first Regression Model are Empathy, Motivation, and Self-Management.

- Self-Management 0.73(P- value)
- Motivation 0.38 (P-value)
- Empathy 0.13(P-value)

After this, we run the Regression Model again on the remaining data that we have left with 4 predictor variables.

Running the Model 2nd Time

Multiple R	0.39
R Square	0.15
Adjusted R Square	0.13
Standard Error	0.87
Observations	128.00

Table 7- Regression Statistics

	df	SS	MS	F	Significance F
Regression	4.00	16.91	4.23	5.61	0.00
Residual	123.00	92.70	0.75		
Total	127.00	109.61			

Table 8- ANNOVA

	Coefficients	Standard Error	t Stat	P-value (sig 5%)
Intercept	4.75	0.80	5.95	0.00*
Self awareness	0.32	0.14	2.30	0.02*
Motivation	0.11	0.13	0.82	0.41
Empathy	0.28	0.18	1.58	0.12
Relationship management	0.46	0.16	2.94	0.00*

Table 9- P-values

After running the Regression Model the second time, the result indicates that these Predictor Variables still are greater than our significance level p=0.05 and are statistically insignificant –

- Motivation 0.414119528(P-value)
- Empathy 0.117406359(P-value)

After this, we run the Regression Model again on the remaining data that we have left with 3 predictor variables.

Running the Model 3rd Time

Multiple R	0.39
R Square	0.15
Adjusted R Square	0.13
Standard Error	0.87
Observations	128.00

Table 10- Regression Statistics

	df	SS	MS	F	Significance F
Regression	3.00	16.40	5.47	7.27	0.00
Residual	124.00	93.21	0.75		
Total	127.00	109.61			

Table 11- ANNOVA

	Coefficients	Standard Error	t Stat	P-value (sig 5%)
Intercept	4.83	0.79	6.09	0.00*
Self awareness	0.34	0.13	2.51	0.01*
Empathy	0.33	0.16	2.02	0.05*
Relationship management	0.48	0.15	3.10	0.00*

Table 12- P-values

After running the Regression Model the third time, the result indicates that the last 3 of the predictor variables of Self Awareness, Empathy, and Relationship Management are statistically significant as their P-values are less than our significance level of 0.05. It is evident that **Self Awareness**, **Empathy**, **and Relationship Management** P-values were 0.01, 0.05, and 0.00, respectively in predicting academic achievement were significant.

For further if we wish to predict our Dependent Variable of GPA, it can further be done by the **Regression Equation** that has been formulated and given below-

The Regression Equation would be GPA = 0.34*Self Awareness + 0.33*Empathy + 0.48*Relationship Management + 4.83(Intercept)

Conclusions

The purpose of the study was to examine the relationship between emotional intelligence and academic achievement. To accomplish this goal, a correlational study was conducted. The research question that guided the study was: How much does a student's emotional intelligence—as determined by their *motivation*, *empathy*, *self-awareness*, *and relationship management*—account for their academic performance when learning online? The sample consisted of mixed 128 undergraduate and post-graduate students, who completed an online survey consisting of the 25-item Emotional Intelligence Questionnaire and some brief demographic questions. This study looked at the connections between academic success in distant learning and emotional intelligence. The findings offer evidence in favor of the incremental validity of emotional intelligence (EI) and show how crucial EI is to the academic success of distance learning students. Put differently, in remote learning settings, academic success is predicted by emotional intelligence. Due to the Moderate Positive correlation of 0.36 between the predictor variables and the GPA of the students, it is concluded that there is a positive impact of Emotional Intelligence on academic achievement in an online learning setting. The null hypothesis of

"Emotional Intelligence, as measured by Self-awareness, Self- management, Motivation, Empathy, and Relationship Management, does not explain academic success in online learning" was rejected. The results indicates that the emotional Intelligence competency is endorsed by the predictive variable of Relationship Management having highest Correlation followed by Empathy, Self-awareness, and Motivation. Whereas Self – management showed the least correlation of 0.013. The best predictors of academic achievement, as measured by the GPA using the Regression Model were **Self Awareness, Empathy, and Relationship Management** EI competencies. Whereas Motivation and Self-Management were statistically insignificant in predicting the dependent variable.

Limitations

The main purpose of this study is to what extent a student's level of emotional intelligence, as measured by Self-awareness, self-management, Motivation, Empathy, and Relationship Management explains academic success in online learning due to the COVID-19 Pandemic. But certain factors affect this study as well. Since the sampling procedure was judgmental, the sample selected may not be the true representative of the population. The study design contained several limitations and delimitations due to access, costs, and availability. Due to the COVID-19 Pandemic, the questionnaire was distributed online for getting relevant responses. The study was confined to the responses in the region of Delhi-NCR, five predictor variables - Self-awareness, self-management, Motivation, Empathy, and Relationship Management and one outcome measure of the GPA due to which the result cannot be applied universally. The survey respondents may or may not have been provided with the exact perception of their minds. There are chances of biases in some answers as the whole process was online due to the pandemic and face-to-face interactions were not possible.

Suggestions for Future Study

Given the proposed benefits of introducing the EI skills training to the online business curriculum as a means of supporting student achievement among online learning in students, further research is recommended to assess the effectiveness of such a program in the environment. The results of this study would support that EI supports academic achievement in our given natural online environment due to the COVID-19 Pandemics. A mediating role for one of the variables may also be suggested for future research on the potentially 67 interconnected roles of the EI, transformational leadership development, and student achievement in business education. One such potential mediating variable could be the EI's examination of the relationship between transformational leadership skills and student achievement in online learning. It would be beneficial to have a better understanding of the relationships between all three variables. In addition, a similar study to the present research, using a more balanced distribution of learning styles would be important to understand how learning styles relate to the EI skills and student achievement. If identified, a correlation between the EI and learning styles among the online business student population could support a better understanding of what type of learner is most likely to succeed in online business educational environments.

As such, implementation of the EI skills development program early in the online education process could support greater success among the online business school learning. In addition, integration of the EI coursework in online business education aligns with the educational goals of leadership development for this group of learners, given the supported relationship between the EI and the development of transformational leadership traits. The EI skill training can be beneficial to leadership development. Training in skills related to the EI competencies of interpersonal and leadership may be beneficial to supporting student achievement. Additional research is needed to identify the optimal nature of EI instruction, particularly in an online environment especially during COVID-19.

References

- Adams, N. (2011). Emotional intelligence amongst undergraduate students at a higher education institution (Doctoral dissertation, University of the Western Cape)
- Berenson, R., Boyles, G., & Weaver, A. (2008). Emotional Intelligence as a Predictor of Success in Online Learning. The International Review of Research in Open and Distributed Learning, 9(2). https://doi.org/10.19173/irrodl.v9i2.385
- 3. Berenson, R., Boyles, G., & Weaver, A. (2008). Emotional intelligence as a predictor of success in online learning. The International Review of Research in Open and Distributed Learning, 9(2).
- Buzdar, Muhammad A., & Ali A., & Tariq Ul H. (2019) Emotional Intelligence as a Determinant of Readiness for Online Learning. International Review of Research in Open and Distributed Learning Volume 17, Issue 1, Janvier 2016, p. 148–158. https://doi.org/10.19173/irrodl.v17i1.2149
- Celik, P., & Storme, M. (2018). Trait emotional intelligence predicts academic satisfaction through career adaptability. *Journal of Career Assessment*, 26(4), 666–677. https://doi.org/10.1177/1069072717723290
- 6. Chandra, Y. (2020). Online education during COVID-19: perception of academic stress and emotional intelligence coping strategies among college students. Asian education and development studies.

- 7. Dimitrijevic, A. A., Marjanovic, Z. J., & Dimitrijevic, A. (2018). Whichever intelligence makes you happy: the role of academic, emotional, and practical abilities in predicting psychological well-being. *Personality and Individual Differences*, 132, 6–13. https://doi.org/10.1016/j.paid.2018.05.010.
- 8. Emotional Intelligence | Psychology Today (2021). Retrieved from https://www.psychologytoday.com/us/basics/emotional-intelligence
- Engin, M. (2017). Analysis of Students' Online Learning Readiness Based on Their Emotional Intelligence Level. Universal Journal of Educational Research, 5(n12A), 32-40.
- 10. Goodwin, W., (2016). Assessing the link between emotional intelligence and online student achievement. http://hdl.handle.net/1969.6/689
- 11. Han, H. Y. (2009). Relationship between students' emotional intelligence, social bond, and interactions in online learning. The University of Illinois at Urbana-Champaign.
- 12. MacCann C., Jiang Y., Brown L.E., Double K.S., Bucich M., Minbashian A. Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*. 2020;146(2):150–186. doi: 10.1037/bul0000219.
- Maguire, R., Egan, A., Hyland, P., & Maguire, P. (2017). Engaging students emotionally: the role of emotional intelligence in predicting cognitive and affective engagement in higher education. Higher Education Research and Development, 36(2), 343-357. https://doi.org/10.1080/07294360.2016.1185396.
- 14. Malik, S. Z., & Shahid, S. (2016). Effect of Emotional Intelligence on Academic Performance among Business Students in Pakistan. *Bulletin of Education and Research*, 38(1), 197-208
- 15. Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). TARGET ARTICLES:" Emotional Intelligence: Theory, Findings, and Implications". *Psychological Inquiry*, 15(3), 197-215.
- Online Education In India: The Evolution Of eLearning eLearning Industry (2020, February 12).
 Retrieved from- https://elearningindustry.com/how- elearning-landscape-evolving-with-growth-web-based-learning
- 17. Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition, and personality*, 9(3), 185-211.
- 18. Urquijo, I., & Extremera, N. (2017). Academic satisfaction at university: The relationship between emotional intelligence and academic engagement. *Journal of Research in Educational Psychology*, 43, 553–573. https://doi.org/10.14204/ejrep.43.16064.
- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65(1), 71-95.
- 20. What is Emotional Intelligence (eiconsortium.org)(2000, April 15) Retrieved from www.eiconsortium.org/reports/what_is_emotional_intelligence.html
- 21. What is the difference between Correlation and P-value (dataschool.com) (2021, May 03) Retrieved fromhttps://dataschool.com/fundamentals-of-analysis/correlation- and-p-value/
- 22. Zhoc, C. H. K., Chung, T. S. H., & King, R. B. (2018). Emotional intelligence and self-directed learning: Examining their relation and contribution to better student learning outcomes in higher education. *British Educational Research Journal*, 44(6), 982–1004. https://doi.org/10.1002/berj.3472.
- 23. Zhoc, K.C.H., King, R.B., Chung, T.S.H. *et al.* Emotionally intelligent students are more engaged and successful: examining the role of emotional intelligence in higher education. *Eur J Psychol Educ* **35**, 839–863 (2020). https://doi.org/10.1007/s10212-019-00458-0