Effect of Emotional Intelligence on Academic Performance among Business Students in Pakistan

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Abstract

Emotional intelligence (EI) has been a popular topic in the field of organizational behaviour. Research shows that emotional intelligence successfully predicts job performance and leadership skills. Based on these reasons, this study attempts to evaluate the impact of emotional intelligence on academic performance of business students. It also aims to analyze if business schools contribute to the development of emotional intelligence in students. Data was collected from 325 business students studying in three business-related institutions. This study measures emotional intelligence by employing Trait Emotional Intelligence Questionnaire Short Form (TEIQue SF) and academic performance through grade point average (GPA). Hierarchical regression analysis was conducted to ascertain the effect of emotional intelligence on academic performance of business students. Findings suggested that the relationship between emotional intelligence and academic performance was weak. However, the relationship between emotional intelligence and academic performance improves considerably over the years. These results imply that the curriculum and evaluation system in our business schools needs to be designed adequately in order to reflect the emotional intelligence of our students, as emotional intelligence is a key capability for managerial success.

Keywords: Emotional intelligence, academic performance, business students

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Introduction

To manage and understand emotions is significant to acquire success in various interpersonal and career related fields. Educational institutions have by tradition stressed only on rational and linguistic intelligence, without paying much attention to other types of intelligence. It has been interesting to find out that a great deal of success or failure are not imputable to cognitive abilities measured by IQ tests, but rather attributable to our proficiency or know how to keep social relationships, depicting ourselves positively and manipulating the way others perceive us (Goleman, 1995).

The higher education institutions are responsible to develop knowledge and skills in students but organizations often criticize that the students are not prepared to handle their job duties and the type of roles they have to exhibit in an organization (Clark et al., 2003). In today's cut throat competition, producing the brightest experts only is not enough. Universities should also focus on developing the entire personality of the student which includes intellectual, emotional and social skills which will help graduates in their future endeavors (Seal, et al., 2011). Emotional intelligence has got more significance for a person in reaching his/her goals than general intelligence (Joshi et al., 2012).

Job competencies and curriculum

The purpose of professional education is to prepare students for jobs in their particular professions. However, few business schools are taking benefit from the research addressing emotional intelligence as a medium to develop the intrapersonal and interpersonal skills of students. Business programs are only focusing on giving education to students regarding theory and research. Faculty members rarely have the time to train students and willingly help them to gain skills that will relate to their professional life and in the workplace. Due to lack of these skills in graduates, organizations have to incur additional cost for training these unprepared graduates (Hoberman & Mailick, 1994). One of the lacking skill set belongs to what we now call, emotional intelligence. Emotional intelligence has been shown to relate to job success more than IQ (Goleman, 1995), but a major proportion of the curriculum assessment tests a student's intellectual ability (Clark, et al., 2003).

Emotional intelligence has been widely used as an indicator of performance in various fields including banking, telecom, retailing (Heffernan et al., 2008). Individuals who have developed high level of emotional intelligence are able to recognize and regulate their own and others emotions (Jaeger, 2003). Research

clearly shows that there has been a clear link between emotional intelligence and work performance (Goleman, 1995). Therefore academic performance should also take into account the level of emotional skills of students.

Definition of Emotional Intelligence

The term emotional intelligence was clearly defined and conceptualized by Salovey and Mayer (1990) as: "The ability to monitor one's own feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (p.189). It has also been defined as "the ability of identifying our own feelings and those of others, for inspiring ourselves, and for handling emotions well in ourselves and in our relationships" (Goleman, 1998, p.317). Emotional intelligence is a new and different concept of being smart. It is not merely being nice, rather it is avoiding the direct response to the uncomfortable circumstances (Adele, 2002). Feeling smart is the new Science of emotional intelligence (Grewal & Salovey, 2005).

Within the framework of emotional intelligence, the concept is further divided into approaching emotional intelligence as an ability or as a trait. While a number of problems have been identified with the definition and measurement of ability emotional intelligence, there are studies showing the predictive, discriminant and incremental validity of trait emotional intelligence (Mavroveli, et al., 2007). Therefore, this study employs trait emotional intelligence as the marker of emotional intelligence in students, which hasbeen definedas "pooling of durable affective personality characteristics" (Petrides et al., 2007, p.660). These characteristics include behaviors, views and moods related to understanding, perception, management and expression of emotions as well as self-will and self-control dispositions (Freudenthaler et al., 2008; Mavroveli et al., 2007).

Emotional Intelligence and Academic Performance

Studies have shown that emotional intelligence influences success in academic and professional studies and contributes to performance over and above the contribution by general intelligence (Romanelli et al., 2006). Students who are emotionally intelligent are perceived by their peers and colleagues as friendly and non-antagonistic (Brackett et al., 2011). This improves the relationship between peers and helps in the intellectual development which leads to superior academic performance (Berndt, 1999; Ford & Smith, 2007; Schutte et al., 2001). Emotional intelligence helps in prioritizing thinking, behavior, and lifestyle which aids in academic performance. The self-report measures of EI completed at the start of the

academic year by students can predict their GPA in the final year (Schutte, et al., 2001). Trait emotional intelligence moderates the relation between academic performance and cognitive ability (Petrides, et al., 2004). A study by O'Connor & Little (2003) demonstrates that emotional intelligence measured through GPA by utilizing self-report and ability measure of EI was not a strong indicator of academic achievement. In another study, it was found that the correlation between emotional intelligence and academic achievement was not statistically significant (Bastian et al., 2005). Due to the mixed nature of research literature there is a need to explore the relationship between emotional intelligence and academic performance in the particular context of Pakistan.

Hypotheses

The primary purpose of the study was to examine trait emotional intelligence and how it relates to academic performance. In the light of the literature cited above the hypothesis are as follows:

H₁: There is a positive relationship between trait emotional intelligence and academic performance.

H₂: There is a difference in the level of trait emotional intelligence between first and final year business students.

H₃: There is a difference in the level of trait emotional intelligence between students having high GPA's and students having Low GPA's.

H₄: There is a positive relationship between age and trait emotional intelligence.

H₅: There is a difference in the strength of relationship between trait emotional intelligence and academic performance in the first year and final year business students.

Method

The description of method is presented below:

Sampling Method

For this study stratified sampling was employed. The focus of this research was on the business students. The population was divided into strata which consisted of the five business-related departments/institutes/colleges of the one of the largest universities of Pakistan, out of which three departments were selected randomly. From this strata, another further set of strata were selected. These were the first and final year students of these departments. Finally, responses were collected from randomly selected target sample from each group.

Measures

For this study, it was appropriate to use survey method employing a questionnaire. The following measures were employed for developing the questionnaire.

Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF)

A thirty item questionnaire developed by Petrides (2006) was employed to measure Trait Emotional Intelligence. This questionnaire measures EIon four dimensions, i.e. well-being, sociability, emotionality, and self-control (Shipley, et al., 2010; Smith et al., 2008). It has been demonstrated that Trait emotional intelligence questionnaire is a better indicator of emotional intelligence that the ability measure (Gardner & Qualter, 2010).

Academic Performance

To evaluate how the business students perform academically, their grade point average (GPA) was recorded.

Pilot Study

A pilot study on 20 respondents from business students of final semester of one department was conducted. Cronbach alpha value of the emotional intelligence questionnaire was 0.879 for showing good reliability. An 80% response rate was achieved. Respondents did not indicate any difficulty in the language or structure of the questionnaire.

Data Collection

A total of 450 questionnaires were distributed among the three business departments.

Response Rate

The consistency of the questionnaires was checked and some of them were invalid based on the reason that they were filled without careful reading. Overall the response rate calculated was 81.25 % giving 325 usable questionnaires.

Data Analysis

Data analysis was conducted using SPSS 22 (Statistical Package for Social Sciences). However, before conducting the actual analysis, data was screened for outliers and missing values.

Data Screening

Data screening was done to ensure that the data was clean and ready to go for further statistical analysis. Firstly outliers were detected. In this study the percentage of outliers was 0.30% and Trimming or Winsorizing was less than 5% of data points which does not influence the outcome of hypothesis testing. So the outliers were winsorized by replacing it with next higher value in the data (Duan, 1997; Hawkins, 1980). Little's test for missing values was performed for both EI and GPA and the values were found to be missing completely at random. For replacing missing values, EM method of estimation was employed which is superior than replacing by mean.

Descriptive statistics

Data are being presented in tabular form:

Table 1

Descriptive statistics of GPA and emotional intelligence

Statistic		Grade Point Average	Emotional Intelligence
N	Valid	324	324
	Missing	0	0
Mean		3.2411	4.4406
Median		3.3300	4.4005
Std. Deviation		.49411	.57355
Skewness		-1.062	.151
Std. Error of Skewness		.135	.135
Kurtosis		.867	.665
Std. Error of Kurtosis		.270	.270

Characteristics of the sample

Out of the 330 respondents, 65% of them were females, and 35% were males. The age group of respondents was between 17-24years. It can be seen that majority of respondents were aged 18/19 or 21/22. This was because the target sample was drawn from the first and final semester students. First year students are generally 18/19 years old and final year students 21/22 years old. Data was collected from first and final year business students and sample was almost equally distributed with 48% of respondents from first year and 52% of respondents from the final year. Department-wise, 37% of respondents were from department of IBA, 30% from IAS and 33% from IBIT.

H$_1$: There is a positive relationship between trait emotional intelligence and academic performance.

In order to determine if there was a relationship between trait emotional intelligence and academic performance, the tests of correlation and regression were conducted. The value of Pearson correlation (r = 0.133, p < 0.05) shows that a weak

relationship existed between trait emotional intelligence and academic performance. After correlation, hierarchical regression was conducted to analyze if emotional intelligence significantly predicts academic performance after controlling for age, gender and department.

Table 2
Model Summary for Hierarchical Regression

Model Dependent: GPA	R	R Square	R Square Change
Predictor: Age, Gender, Department	.390	.152	.152
Predictor: Age, Gender, Department, EI	.424	.180	.028

The control variables of age, gender and department were added to the first step of hierarchical regression. Table 2 shows that emotional intelligence predicted 2.8% variance in GPA after controlling for age, gender and department. The results of hierarchical regression gave an R-square value of 0.180 (p<0.05).The model was statistically significant however; EI was able to predict a very small variation in GPA.

H$_2$: There is a difference in the level of emotional intelligence between first and final year business students.

In order to explore the difference in the level of trait emotional intelligence between first and final year business students, t-test was run. The *t*-test was unable to reveal a statistically significant difference between the mean level of trait emotional intelligence of semester 1 (M =4.397, s = 0.570) and semester 8 (M = 4.481, s = 0.523), *t* (322) = -1.316, *p* = 0.189, α = 0.05.

H$_3$: There is a difference in the level of emotional intelligence between students having high GPAs and students having low GPAs.

In order to test this hypothesis independent sample t-test (cut point groups) was applied. For specifying the value for higher or lower GPA students, the median value of GPA i.e.3.33 was taken. So it means value above 3.33 was labelled as high GPA and value below 3.33 was labelled as low GPA. The results of *t*-test show that there was no statistically significant difference between the mean level of emotional intelligence of students having higher GPAs (M =4.48, s = 0.591) and lower GPAs (M = 4.404, s = 0.564), *t* (315) = -1.107, *p* = 0.269, α = 0.05.

H$_4$: There is a positive relationship between age and trait emotional intelligence.

In order to test this hypothesis correlation and regression were applied. The value of Pearson correlation (*r* = 0.112) shows that a small relationship existed between trait emotional intelligence and age. The *p*-value was 0.04(*p*<0.05) so it showed that the relationship was statistically significant. An *R*-square value of 0.013

shows that age predicted 1.3% variance in emotional intelligence, which was a very weak relationship and predictive power.

H$_5$: There is a difference in the strength of relationship between trait emotional intelligence and academic performance in the first year business students and final year business students.

In order to test this hypothesis regression analysis was employed after splitting the dataset into the two groups of first and final semester.

Table 3
Model Summary for difference in relationship between first and final years

Semester	*R*	*R* Square	*F*	Sig.
1	.131	.017	2.647	0.106
8	.184	.034	5.870	0.016

Table 3 shows that there was a significant difference in the relationship between emotional intelligence and academic performance of students in first and final year. While EI only predicts 1.7% of GPA in first semester, the value doubles in the final semester, EI predicted 3.4% variation in academic performance. From the *F* statistic and *p*-value, it is also evident that the relationship was not significant ($p>0.05$), whilst the relationship turned significant ($p<0.05$) in the final semester. Although, a value of 3.4% was significantly weak, yet there was a significant increase in the value from the first to final year.

Discussion

This study explored the relationship between emotional intelligence and academic performance. Results show that the relationship was quite weak. The level of emotional intelligence should increase with advancement in academic progression which appeared to be occurring as there was a significant difference between the ability of EI to explain GPA in the first and final years students. In the first year, EI does not significantly explain GPA whilst in the final year, EI significantly explains GPA, although the predictive power is still considerably low. The level of EI should be higher for students having high GPAs than those having low GPAs but that is not statistically different. The relationship between EI and age is positive but the predictive power of age over EI is quite low. One of the reasons of this weak relationship is that the educational measurement and assessment techniques do not take into account a person's emotional ability. These are only focused on assessment of mental ability consisting of memorization and reproduction. Therefore, emotional intelligence does not reflect in academic performance. Whereas, business studies is

such a discipline which must polish this strength, because it has been established that emotional intelligence is an extremely important element in managerial success.

Limitations

Like all research designs, this study also has a few limitations. First, the results may be cautiously generalized since the data has/ been collected from only one university. However, the results may be generalized on the fact that similar pedagogy and curriculum is being followed by most universities in Pakistan, as the Higher Education Commission of Pakistan provides guidelines for designing course outlines and teaching methodologies in all the HEC recognized universities. The second limitation is cross-sectional research design and the improvement in emotional intelligence has been observed by taking first and final year students' scores. This type of design may be considered as longitudinal as it observes progression but it is not longitudinal in strict terms. The third limitation is that self-report measure has been employed to measure emotional intelligence, which may be supplemented by an external assessment as well. Finally, the issue of common method bias is present.

Suggestions for Future Research

In this research study the measurement of emotional intelligence was a self-report measure of students' views about their behaviors, and not an actual measurement of emotional intelligence. They are self-perceived abilities not actual abilities. It would be valued if future research could assess actual emotional intelligence abilities. Future research needs to observe the long-term effects or longitudinal effects of emotional and social competency on academic success. Further research should also observe emotional intelligence and work experience by taking subjects from different fields of work. Future research can also observe the actual effect on student's performance when emotional competencies are integrated in the curriculum.

Conclusion

The practical implications of this study for the academia are numerous. For preparing students to cope with the dynamic and competing business environment it is essential to integrate emotional intelligence training into the business curriculum. Business education can help students to learn the cognitive, social, and emotional competencies but these competencies are not developed through traditional lecture and discussion methodology with prime emphasis on theory based knowledge. The popular saying 'we become what we measure' haunts the education sector. Business students should graduate with a solid basis in the knowledge and skills that will help them to become outstanding managers and effective leaders.

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