



An Analysis of Emotional Intelligence of Undergraduate and Postgraduate Students at the University of Malakand

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Abstract

The purpose of the study was to analyze the emotional intelligence of undergraduate and postgraduate students at the University of Malakand. A quantitative research design was followed to conduct the study. Data were collected based on a survey instrument consisting of already developed scale with the permission of its author. The population of the study was 450 while the sample size was 199 students Including 144 BS, 32 M. Phil and 24 PhD from Randomly selected public sector university (University of Malakand). The data were analyzed based on mean scores, and standard deviations and inferential statistics, ANOVA and TUCKY TEST. The null hypothesis there is no significant impact of educational level on emotional intelligence was rejected and the second null hypothesis there is no mean significant difference on age bases was also rejected it shows that educational level and age enhances emotional intelligence. The results of the study showed significant effects of educational level and age on emotional intelligence among undergraduate and postgraduate students. Further research is suggested to test the results of this study in other contexts like gender, culture etc. for more comprehensive understanding of emotional intelligence.

Keywords: Educational Level, Emotional Intelligence, Undergraduate and Postgraduate Students, University Of Malakand

Introduction

Emotion provides an integral part of a personal and professional life of an individual since it is one of the basic units of a human personality and existence. Emotions are a powerful psychological state that helps individuals to express them clearly regarding their inner feelings. They are part of an individual's nature and act as initiators of behaviours, providing a chance to express one's feelings in their environment. If combined with thought, they lead to the formation of feelings that act as great motivational systems, which keep on compelling us to act in urgency and seek answers to many challenges. Further, emotions play a key role in social contexts, fostering interpersonal and intrapersonal communication and relations (Fischer & Manstead, 2018). EI is responsible for about 90 percent of the success of the leaders (Cherniss & Goleman, 2001).

One's ability to perceive, use, understand and manage own emotions and those of others, differentiating emotions in thought and behaviour. It's an ability to perceive, use, understand, and manage emotions. Besides, the relationship between one's level of education and his/her emotional intelligence is such that individuals practicing the teaching-education profession will be likely to be more aware of their own feelings and hence learn a better sense of self and others' control stimulation (Noriah et al., 2006).

The levels of emotional intelligence are also usually high in the persons above the age of 40 years. Studies have also shown strong relations between age and emotional intelligence levels. It, therefore, implies that emotional intelligence develops with the accumulation of life experience. For example, those between ages 40-49 years usually exhibit much higher overall emotional intelligence as compared to the group between ages 20-29, (BarOn, 1997a), which supports the idea that one's emotional intelligence gets better with advancing age. On studies carried out on the university undergraduate students, for example, Benson, Martin, Ploeg& Wessel, 2012, older students usually indicated a higher level of the emotional intelligence as compared to their younger students. While some studies argue that emotional intelligence cannot be influenced by age, a number of findings affirm a positive relationship between emotional intelligence and age, indicating that as the age increases with the accumulated exposures, emotional intelligence grows and matures with (Goleman, 1998; Salovey& Mayer, 1990; Maddocks& Sparrows, 1991).

Review of Related Literature

Emotions are, as acknowledged by (Barutcugil, 2004) residual behavioural manifestations and physiological responses in and within people's bodies that project inferred interior state's information and may implicitly or explicitly influence information enough to move a body toward assessed cognition. This ability to identify, comprehend, and manage one's emotions and those of others to use such emotional perception to guide thoughts and actions is what (Mayer,& Salovey, 1993), who are the originators of the emotional intelligence definition, called emotional intelligence Reactions towards environmental issues. The word "emotion" is derived from the Latin "motere," with the "e-" prefix meaning "to move out," which implies that emotions are the motivation of behavior, as is clearly seen in animals or small children. Another popular stereotype is further negated with Goleman's (2013) definition of those having low emotional intelligence and/or having high; also relative to their cognitive intelligence or IQ. According to him emotional intelligence and cognitive intelligences are not much interrelated and they differ much. Further Goleman explains emotions as human action catalysers aimed from evolutionary development and acts as immediate

Self-motivation, resiliency during hardship, impulse control, mood regulation, empathetic understanding and developing optimism are the elements of emotional intelligence. He believes that emotional intelligence colours the application of intellectual ability: it determines how one mobilizes his or her intellectual abilities. In effect, emotional intelligence is a set of skills that array side by side with such traditional academic competencies as explicit and mathematical reasoning. In this way, emotional intelligence is a meta-competency, a wide array of competencies that determine the extent to which other kinds of talent, such as native intellectual (Goleman, 2013).

Emotional Intelligence

Emotional Intelligence can be seen in very general terms as a concept that underpins or encompassed by many existing psychological theories, such as social cognitive theory and personality trait theory, being important in predicting good life outcomes and adaptable to improvement for future benefit (Qualter, Gardner, & Qualter et al., 2007, 2009; Whiteley, 2007; Gannon & Ranzijn, 2005; Brackett et al., 2006; Boyatzis& Saatcioglu, 2008; Nelis et al., 2009).

Emotional intelligence is the ability to recognize, manage, and assess the emotions of others and of self. However, Salovey and Mayer added an EI theory in 1990. However, there is controversy prevailing about the usability and validity of EI due to its variation regarding its definition and measurement. To grapple with these problems, Perez, Petrides, and Furnham (2005) differentiated two concepts of EI: trait EI which defined "emotion-related self-perceived dispositions of personality measured through structured personality-based self-reports and ability EI which meant "intelligence by deferential use of the label to emphasize measurement with traditional ability assessments." This differentiation proved valid by additional studies were held. (Van Rooy, Viswesvaran, & Pluta, 2005; Qualter, Gardner, & Whiteley, 2007). Intelligence is understood in the capacity to adjust oneself to the environment. This transition is affected by culture and society.

This can be taught by everyday experience with reflective thinking for better learning (Sternberg, 2003). Banks (2012) noted that intelligence is a psychobiological capacity to process information in solving social problems. Doing so necessitates the awareness of own the feelings and emotions of an individual. Emotion is a very essential component of our everyday life. It affects day-to-day interactions and achievements. EI has a colossal effect on daily life, and it also has a notable effect on career development. Amazing is the fact that emotional intelligence amplifies very significant chances for people to learn in something about themselves regarding development or career. (Fida, Ghaffar, Zaman & Satti 2018) assume that emotional intelligence develops emotional stability and students in a university should be steadier and more talented than the average person.

The Role of Emotions

Emotions practically affect every sphere of our lives, beginning from our business life up to our personal relations. They form a reason for behavior and are one of the main elements of human nature and provide a person with the ways for self-expression and help others to make assessments of his or her emotional condition. Feelings are generated by the interaction between emotions and cognition. As an alarm system, emotions guide rapid reactions to dangerous situations and are central to interpersonal relations and one's position in a group (Fischer & Manstead, 2008). Emotions are seen in the workplace, and they make us do what we do every day. Emotional intelligence is now seen to be among the essentials in stress-related decision-making, motivation, and job satisfaction. The same view has been increasingly recommended in incorporating emotional intelligence in institutions of higher learning, with research suggesting two major advantages in academic stress management and enhancement of decision-making skills (Caudron, 1999). EI is something more than just academic success, for it includes self-awareness, self-control, and interpersonal skills all of which are likely to come up as more and more pertinent in today's competitive educational environment (Goleman, 1995).

Emotional Intelligence and Academic success:

Studies have elaborated that EI is believed to be indispensable in achieving excellence in academics and professional growth of individuals. Again, echoing similar sentiments, scholars EI is essential in promotion of student performance. Emotional intelligence is crucial for managing relationships and personal emotions and for overcoming challenges in the class and subsequently at the workplace. Instructors have many measurement tools for emotional intelligence that can help them identify the areas of weakness and, as a result, intervene in ways that will yield maximum results (Al-Rabadi, 2012). There has barely been any relation between educational competence and EI. While there are positive links between EI and grades, as conducted in earlier research by however, contributed to further understanding in showing how emotions and logical thought are linked, which would have an impact on learning and decision-making. His theory of somatic markers unmistakably portrays that physiology responses influence mental judgments (Marquez, Martin, & Brackett, 2006).

The emotional intelligence in relation to the daily life of a person. They used the discriminating and emotional intelligence measure on 330 students. They used the living space scale, the Big Five-Factor personality scale and the emotional intelligence ability test. The life space scale also measures a person's educational pursuits, personal leisure activities, interpersonal communication as well as self-care behaviour. They found out that women had higher emotional intelligence than what men did. At the same time, they found out that emotional intelligence is a feature that distinctly foretells a man's life but fails to do so in a woman's case, (Bracket, Mayer & Warner, 1990). The fact that success and emotional intelligence relate directly was taken forward EQ is a fast-emerging concept and, at the same time, a controversial matter, as some scholars argue that it strongly affects performance, while others are in a state of refutation. It is believed by a large proportion of scholars and psychologists that EI is a very pragmatic concept, significant for the academic achievement of students. Today's educational environment and the market environment require that the students succeed not only in their reasoning abilities, but also in the aspects of self-awareness, self-regulation and interpersonal and intrapersonal skills (Goleman, 1995).

Academic determinants would be previous educational level, type of secondary school, the year of degree and educational performance of three cooperating universities found only out of the three that proved the fourth-year accounting students had higher EI than the first-year students, meanwhile was found to have the EI level of the students to be considered a factor on the number of their GPA. One can read that students having higher GPAs score much above on the emotional intelligence level while comparing students with varying GPAs. It is also found that students belonging to full embarquement schools portray higher levels of EI when one contrasts students coming from regular daily schools. However, one finds that students staying at home have a better level of EI compared to those who do so in dorms. In addition, study on the impact of education level previously attained discovered that the EI among staff is dependent on the past. According to research, it indicated that there is high dependence on emotional intelligence as far as the learning and performance among children is concerned. For instance, some researchers conducted their investigations in this field and made very useful and interesting conclusions, among them being (Al-Rabadi, 2012; Bar-On, 2006; Feldmann et al., 2011; Parker, 2005).

Statement of the Problem

Emotional intelligence plays significant role in the personal and academic life of students. It is essential because it affects the academic achievement of students, those individuals who are emotionally intelligent, they secure good marks and those who are not emotionally intelligent have low academic achievement (Xue et al, 2023). However, there is ongoing debate among psychologists regarding the relationship between age and EI. Some studies suggest that EI increases with age due to accumulated life experiences and maturity (Golman, 1998; Solvey & Mayer, 1990; Maddocks & Sparrows, 1998 Javaid et al, 2024). Others argues that age has no significant impact on EI development (Cakan & altun, 2005). Contrasting findings highlights the importance of this research to revisit this problem carefully and to explore the impact of age and educational level on emotional intelligence.

Objectives of the Study

The main objectives of the research were

1. To explore the impact of educational levels on emotional intelligence.
2. To compare the emotional intelligence on age base.

Research Questions

1. What is the level of emotional intelligence with respect to educational level?
2. What is the difference in emotional intelligence with respect to age?

Research Hypothesis

H0₁: *There is no mean significant difference of educational level on emotional intelligence.*

H0₂: *There is no mean significant difference in emotional intelligence on age bases.*

Significance of the Study

It was provided an insight for curriculum planners and teachers that the interaction of students with environment, other students and teachers should be increased so that emotional intelligence may be enhanced.

This were helped the academic institutions to adjust the curriculum so that students' emotional intelligence can be enhanced and they can fight through professional and personal issues in life. Besides, the results of this study was prove helpful to policymakers to plan and design some strategies that improve the emotional intelligence of students and help to develop a better society having emotionally intelligent people.

Delimitations of the Study

Because of the time and resource constraints, this study was delimited to University of Malakand undergraduate and post graduate students. Both male and female students provide the data. The only instrument used by the researcher to collect data was a survey questionnaire.

Limitations

Collection of data from PhD students, because of less enrol students in the University of Malakand.

Difficulties to excess to the related literature, because of least work on the same research area.

Methodology

Research Design

The current research study is of quantitative nature and adopts the use of quantitative data collection instruments. The primary concern of the current research study is to offer an analysis of the emotional intelligence of undergraduate and postgraduate students at the University of Malakand. A quantitative analysis has also been introduced to the current study for the measurement of the validity of the study. For percentage variation in the level of how the participants are involved. The particular research was conducted at the University of Malakand that offers an undergraduate, graduate wide range program and degree level of bachelor, master, and doctorate. Students belonging to different origins and ethnic identities are required to study here. The inclusion of 199 students in this study (144 BS, 32 MPhil, and 24 PhD students) was carried out through a random sampling technique. The BS, MPhil, and PhD students were taken randomly from seven departments. In this survey, students of undergraduate and postgraduate level have been selected, and an equal number of students have been picked from each department, which consists of the education, management science, IT, Pashto, Urdu, English, and statistics.

Data Collection Tools

In the present research work, the data was collected through a questionnaire that was already standardized. The scale consisted of 55 items.

Validity of the scale: The author allowed the researcher through email. The permission letter is attached in research. The scale for EI was validated from five experts (Appendix A).and their suggestion were incorporated in the scale to use in our own culture, the experts translated the statements into Urdu with the permission of author.

Reliability: The researcher distributed 35 questionnaires among university level students. Pilot testing was done with 35 responses. The Cronbach alpha was .82 and the questionnaire was translated into Urdu by two experts. It consisted of such statements

1. I value feedback for motivation.
2. I do not cooperate with others.

Responses 1 NOT AT ALL, 2 RARELY, 3 OFTEN, 4 ALWAYS, 5 NOT APPLICABLE

The questionnaire consisted of two types data

1. Demographics

The first half of the questioner is about the demographic details of students i.e. department education level and age and it includes four questions and the second half is about the emotional intelligence. The total number of items in the second half is 55 which is composing of the emotional intelligence. In this order to find out the emotional intelligence of the students a point six Likert scale has been used in the questioner from "NOT AT ALL" to "NOT APPLICABLE".

Data Collection

The research topics that are covered in this current study become the source for the current research project. The general methodology of the present study was as follows:

Study of thirty subjects was done first to ensure the reliability of the work. The children had no difficulty in responding to all the responses.

Similarly, the questioners were administered to the pupils in the right order. The items on the questioner were briefly explained to the responders by the instructor. After the respondents had an attempt, the copies were retrieved. The respondents were students studying their BS, MPhil, or doctoral degrees in different fields. After the lesson, the researcher conducted the study questionnaires with the responses answering for thirty minutes. Afterward, the researcher collected the same in a classroom environment.

Data Analysis

The data were analyzed using the SPSS version 22. The Descriptive Statistics method was employed in analyzing the background personal information of the students. Descriptive Statistics were also applied to the perceptions of emotional intelligence of students. The data pertaining to the responses regarding the emotional intelligence of undergraduate and postgraduate students were plotted on SPSS for the calculation of the frequencies, percentages, means, and standard deviations for each feedback of the questions. Further inferential Statistics ANOVA and TUCKY TEST were applied on the data. Below is the analysis that is given on the difference that seems to be between the perceptions of the undergraduate and postgraduate students regarding the emotional intelligence.

Data Analysis and Interpretation

Section 1

Descriptive Analysis and Interpretation

**Table 1. Education Level Demographic Sample data of University of Malakand
1: Students the emotional intelligence of high level of students is high**

Education Level	<i>N</i>	Mean	<i>SD</i>
BS	144	205.5556	30.636
M.Phil.	32	240.1875	36.033
PhD	24	244.2500	19.177
Total	199	215.7400	34.473

(N=199)

This table illustrates the distribution of emotional intelligence scores across different education levels. The table shows that there are 144 respondents with a BS degree, with a mean emotional intelligence score of 205.56 and a standard deviation of 30.64. There are 32 respondents with an M.Phil Degree, with a mean score of 240.19 and a standard deviation of 36.03. Additionally, there are 24 respondents with a PhD, with a mean score of 244.25 and a standard deviation of 19.18. The total number of respondents is 199, with an overall mean emotional intelligence score of 215.74 and a standard deviation of 34.47. This indicates that emotional intelligence scores tend to increase with higher education levels. Therefore the null hypothesis has been rejected.

Table 2. Age Wise Demographic Sample Data of University of Malakand Students
2: The level of emotional intelligence increases with age

Age	N	Mean	SD
18 to 24	150	206.9533	31.24257
25 to 31	22	239.8182	41.63748
32 to 38	14	246.2857	21.57074
39 and above	14	241.5000	12.13862
Total	200	215.7400	34.47368

(N=199)

The table provides about emotional intelligence scores categorized by age groups. Among individuals aged 18 to 24, constituting 150 respondents, the mean emotional intelligence score was 206.95, with a standard deviation of 31.24. In the 25 to 31 age group, comprising 22 respondents, the mean score notably increased to 239.82, with a standard deviation of 41.64. Similarly, for the 32 to 38 age, with 14 respondents, the mean emotional intelligence score rose further to 246.29, with a standard deviation of 21.57. Among those aged 39 and above, consisting of 14 respondents, the mean score remained high at 241.50, with a lower standard deviation of 12.14. Therefore the null hypothesis has been rejected.

Section 2

Inferential Data Analysis and Interpretation

Table 3. Emotional Intelligence on the Basis of Educational Level

1. Ho3: There is no mean significant difference of educational level on emotional

Groups	Sum of Squares	Mean Square	F	Df	Sig.
Between Groups	53569.549	26784.775	28.845	2	.000
Within Groups	182928.931	928.573		197	
Total	236498			199	

There is a significant difference in emotional intelligence between the groups with respect to educational level at a significance level of ($.000 < .05$). The mean square between the groups is 26784.775 with a degree of freedom of 2.

Table 4. Post Hoc (Tukey HSD) Test for Measuring Mean Difference among Groups with respect to Educational Level

(I)Education level	Mean (I-J)	Std. Error	Sig.
BS vs M. Phil	-34.63194	5.95536	.000
BS vs PhD	-38.69444	6.71855	.000
M.Phil. vs PhD	-4.06250	8.22852	.874

The mean difference in emotional intelligence is significant between individuals with a BS degree and those with M.Phil and PhD degrees. Specifically, the mean difference between BS and M.Phil is -34.63, and between BS and PhD is -38.69, both highly significant ($p = .000$). Similarly, significant differences are observed between M.Phil and BS (mean difference 34.63, $p = .000$). However, there are no significant differences between M.Phil and PhD (mean difference -4.06, $p = .874$), nor between PhD and M.Phil. (Mean difference 4.06, $p = .874$). This shows that emotional intelligence significantly increases from BS to higher education levels (M.Phil. and PhD), but remains stable between M.Phil and PhD.

Table 5. Emotional intelligence on the basis of Age Level

H04: There is no mean significant difference in emotional intelligence on age bases

Groups	Sum of Squares	Mean Square	<i>F</i>	<i>Df</i>	<i>Sig.</i>
Between Groups	46688.177	15562.726	16.070	3	.000
Within Groups	189810.303	968.420		196	
Total	236498.480			199	

There is a significant difference in emotional intelligence between the groups with respect to age at a significance level of ($.000 < .05$). The mean square between the groups is 15562.726 with a degree of freedom of 3.

Table 6. Post Hoc (Tukey HSD) Test for Measuring mean differences among groups with respect to Age level

(I)Age	(J) Age	Mean (I-J)	Std. Error	<i>Sig.</i>
18 to 24	25 to 31	-32.86485*	7.10459	.000
	32 to 38	-39.33238*	8.69649	.000
	39 and above	-34.54667*	8.69649	.001
25 to 31	18 to 24	32.86485*	7.10459	.000
	32 to 38	-6.46753	10.63917	.929
	39 and above	-1.68182	10.63917	.999
32 to 38	18 to 24	39.33238*	8.69649	.000
	25 to 31	6.46753	10.63917	.929
	39 and above	4.78571	11.76204	.977
39 and above	18 to 24	34.54667*	8.69649	.001
	25 to 31	1.68182	10.63917	.999
	32 to 38	-4.78571	11.76204	.977

The mean difference in emotional intelligence is significant between the ages 18 to 24 and 25 to 31, with a mean difference of -32.86. Similarly, significant differences are observed between the ages 18 to 24 and 32 to 38 (mean difference -39.33), and between 18 to 24 and 39 and above (mean difference -34.55). However, there are no significant differences between the older age groups themselves, specifically between ages 25 to 31 and 32 to 38, 25 to 31 and 39 and above, and 32 to 38 and 39 and above, as the mean differences are -6.47, -1.68, and 4.79 respectively. This shows that emotional intelligence significantly increases from ages 18 to 24 to older age groups but remains stable among individuals aged 25 and older.

Discussion

The study investigated the emotional intelligence (EI) of university students, employing a quantitative correlational design with age and educational attainment as independent variables, and emotional intelligence as the dependent variable. Results revealed that postgraduate students scored higher in EI than undergraduates, and there is a strong correlation between EI and academic performance. Openness, driven by globalization and technological change, emerged as a key trait. The study also found that older students, particularly those around 24

years, exhibited higher EI compared to younger peers, supporting Goleman's claim that EI increases with age, though some contradictory findings were noted. Overall, interactions with the environment were linked to higher EI, and despite some inconsistent results, the study concluded that EI generally improves with age and personal interactions.

Conclusions and Recommendations

This study found a positive relationship between age, educational level, and emotional intelligence among students at the University of Malakand. Emotional intelligence scores significantly increased with higher education levels, with postgraduate (MPhil and PhD) students demonstrating higher emotional intelligence compared to undergraduate (BS) students. Similarly, emotional intelligence showed an upward trend with age, stabilizing among those aged 25 years and above. These findings suggest that both education and age positively impact emotional intelligence.

It is recommended that educational programs incorporate strategies to enhance emotional intelligence, particularly at the undergraduate level, to prepare students for effective emotional management in real-life situations. Additionally, aged and postgraduate students can be encouraged to mentor younger and less experienced students, leveraging their higher emotional intelligence for peer guidance and support.

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