



RESEARCH PAPER

Effect of Emotional Intelligence on Resilience among University Students at Undergraduate Level

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ABSTRACT

This study was an attempt to explore the effect of emotional intelligence on resilience among undergraduate students. As the study was quantitative in nature, casual comparative research design was used. The population of the study was undergraduate students in the education department of the public and private universities in Lahore. Total population was 2688 students, 802 from private and 1886 from public universities. Sample of 538 respondents was selected by using stratified random sampling technique. The strata were formed on the basis of nature of the institution (public vs. private). The instrument consisted of three parts: first part comprised of demographic information (gender, institute type, name of the university). The second part consisted of Emotional Intelligence Scale, develop by Schutte (1998), which contained 33 items. The third part consisted of Resilience Scale develop by Wagnild and Young, (1993), that contains 25 items. Data was collected individually from participants through questionnaire by survey method. Multiple regression analysis was used to examine the effect between variables. An independent t-test was applied to determine the difference between the two groups such as public vs. private and male vs. female. Results showed that emotional intelligence has a significant effect on resilience. It was recommended to develop educational programs that helps youth improve their emotional intelligence and resilience.

KEYWORDS Emotional Intelligence, Resilience, Undergraduate University Students

Introduction

The ability to comprehend emotions and affection is termed as emotional intelligence. Emotional state of an individual is a pertinent aspect of one's personality. The tendency of emotions regulate day to day dealings with people in surroundings, it is also useful to control many psycho-physiological and other inward frameworks. The ability to recognize things effectively increases with high emotional intelligence. High IQ level makes people more successful and creative (Rehana, 2016).

Emotional intelligence is a capacity to recognize individuals' value on a deeper level, it implies a knowledge which allows one to recognize his and others' emotions. It empowers the separation of these feelings with the goal that reasonable choice can be directed to think and act appropriately (Navas & Vijayakumar, 2018).

Higher emotional intelligence is associated with a more resilient personality, which facilitates change adaptation under pressure and prevents people from viewing change as a threat but rather as a challenge (Schneider et al., 2013).

Resilience is a word from the Latin word 'resilire' which means to rebound or recoil, the act of rebounding. If a worker is resilient by birth or develops the skill, he/she will be internally motivated to act better. In the mid-nineteenth century, the term resilience refers to mouldable qualities of internal components (Rehman et al., 2022).

One of the key psychological components of an individual's ability to adjust to adverse circumstances is resilience. This necessitates the application of techniques for positive reinforcement that enhance well-being. In the academic realm, resilience is important because it fosters the growth of students' social, intellectual, and personal skills, enabling them to overcome challenging circumstances (Allen et al., 2019). There are three stages of resilience found in literature, first is portrayed by the existence of circumstance when the person is found in a state of equilibrium both physically and mentally, needs assets and abilities to adapt to it. In the second stage, the individual attempts to reconcile to get back the lost balance. At long last, the individual recovers balance by securing new abilities (Fletcher & Sarkar, 2013).

Resilience has been explored in the educational field by various perspectives (DeRosier et al., 2013), frequently concentrating on the outside features of pupils instead of what happens while in class or the effect it applies to adaptable approaches to acting. Despite this, research has shown that desire and resilience are positively correlated (Magnano et al., 2016), performance (Wong, 2008), and positive emotions (Cohn et al., 2009). But despite the research that has been done on the subject of education, research is as yet meager, often focused on students' external aspects rather than on what occurs in lessons and how it affects the educational setting about other harmful psychological factors that pupils may be experiencing (Trigueros et al., 2020). According to many academics, Resilience is characterized as the capacity to twist yet not break, return, and potentially even prosper despite misfortune. It is limit of dynamic framework to adjust effectively to aggravations that undermine the feasibility, the capability, or the advancement of that framework (Rehman et al., 2022).

Resilience and emotional intelligence are significant protective variables. Thus, emotional intelligence helps people to understand their emotions and others. It is important for students to be more resilient, emotionally secure, and adept at handling challenges that arise regularly (Bano & Pervaiz, 2020).

Literature Review

Emotional intelligence

The capacity to recognize, comprehend, and constructively utilize emotions to interact well, understand, conquer obstacles, resolve conflicts, and manage anxiety is termed as emotional intelligence EI. While using Ability EI model, emotional intelligence is the tendency to be aware, assess, and control emotions of one's own self as well as of others' emotions (Mayer et al., 2008).

American psychologists Salovey and Mayer (1990) defined EI as an ability to regulate and control own and others' emotions, ability to distinguish between others' emotions, and ultimately utilizing this knowledge in order to providing guidance about one's thinking and behavior. It is a registered fact that the people with high intelligence

are able to not only perceiving their own feelings effectively, but also to perceive others' feelings effectively and better using emotions to guide actions. Literature reported that emotional intelligence (EI) as a term was first introduced in book "Emotional Intelligence" (Goleman, 1995; Kunnanatt, 2004) by an American journalist, psychologist as well as a writer named Daniel Goleman.

The emerging concept of emotional intelligence adds that perceiving, valuing, and conveying emotions accurately, it is the ability that is used; for acquire sentiments that enhance thoughts; to comprehend emotions and emotional understanding; or control one's emotions by promoting intellectual and emotional progress (Mayer & Salovey, 1997).

Emotional intelligence is currently viewed as significant in basically all aspects of the world. Individuals and specialists have written various periodicals, books, papers, articles, logical analyses, and different materials because of it. Besides, a Google look for the expression "emotional intelligence" yields up to 17,000,000 outcomes (fourth July 2017), exhibiting how EI is a significant component of the present culture (Rehman et al., 2022).

Emotional intelligence has been divided into three models: the ability, mixed, and trait models except for Salovey and Mayer, have different definitions of the concept, and some, like Bar-On, Goleman, and Petrides, have categorized it as non-cognitive, with the exclusion of Salovey and Mayer, who were creators in the field. Emotional intelligence has generally been defined by the models currently in use as personal intellect and social intelligence (Kanesan & Fauzan, 2019).

The tendency to know and classify one's own emotions and those of others, then utilize that understanding to guide one's actions and decisions, is known as emotional intelligence (Salovey & Mayer, 1990). On the other hand, Goleman (1995) described emotional intelligence as any innate quality of a person that cognitive intelligence is unable to identify.

How likely an individual copes up with the stress and demands of the surrounded environment and the way his non-cognitive ability, skill, or aptitude work towards managing the requirements of environment is known as emotional intelligence as per Bar-On (1997). Conversely, emotional intelligence was defined by Petrides and Furnham (2001) as a trait, characterizing it as a constellation that how emotional perceptions present at different levels of social hierarchy. Certain definitions have led to various models of EI such as the ability model, the mixed model, and the trait model.

Across the current models, EI is usually categorized into social as well as personal intelligence. The commonly used concept of EI is explained as the ability to regulate own state of emotions that is said to be taken as personal, while understanding others' emotions is the social aspect defined by Salovey and Mayer (1990). Comparatively, Bar-On's put it other way in mixed model of EI (Bar-On, 1997) that both personal and social components of emotional intelligence comprehend its concept. Nonetheless, Goleman's (2001) enhanced the mixed model emphasizing both personal self-awareness and self-management and social relationship management (social). Similarly, Petrides and Furnham (2003) agreed on the EI definition with personal as well as social aspects. Concluding that the initial model proposed by Mayer and Salovey (1997) is already complete and EI is based on both levels including personal and social intelligence.

The Bar-on model of EI explained emotional-social intelligence with the range of not only regulating one's own emotions but side by side having a sense to comprehend others emotions and meeting the demands of external environment is emotional intelligence (Bar-On, 2010).

The following is how the five dimensions are displayed: (1) emotional self-awareness, self-assurance, self-esteem, self-actualization, and independence; (2) interpersonal skills, indicating a person's capacity for empathy, relationship maintenance, and commitment to social obligations; (3) adaptability, signifying a person's capacity for reality testing, problem-solving, and flexibility; (4) stress management, indicating a person's capacity for tolerating stress and exercising impulse control; and (5) general mood, signifying a person's degree of happiness and optimism (Lyusin, 2006).

Resilience

Some people may bounce back from traumatic life events faster than others and learn valuable lessons from them. According Luthar et al. (2000), resilience is an active method in which an individual responds surely to adversity. Stated differently, resilience refers to a dynamic system's ability to successfully adjust to substantial challenges to its development, viability, or function (Masten, 2013).

Everall et al. (2006) claim that models of resilience had mainly concentrated on one of three operational definitions: (a) resilience as the steady character attribute that shields people from a damaging impacts of threat or difficulty; (b) resilience as the beneficial result, which are described by an occurrence of constructive intellectual well-being (such as optimistic self-perception and self-respect, scholastic achievement, accomplishment at child-friendly progressive errands, etc.), despite being exposed to risk, and the lack of psychopathology; (c) resilience as the progressive procedure dependent upon connections among personal or environmental factors that change over time (Metzl & Morrell, 2008).

According to Martin and Marsh (2009), resilience is the ability, method, or result of successfully adapting in difficult or dangerous conditions. The ability of a student to effectively manage prospective environmental problems resulting from early features, circumstances, and experiences is known as resilience in an academic setting (Martin, 2013). To avoid poor performance in school and eventually dropping out, kids must exhibit high intrinsic drive and performance even in stressful events and circumstances.

Conversely, Fletcher and Sarkar (2012) defined resilience as the existence and possession of vulnerability and preventive elements that affect an individual's ability to positively adjust to risk, both within and outside of them. Numerous studies have looked at these protective elements of resilience to pinpoint the characteristics of resilient people in the workplace (MacEachen, Polzer & Clarke, 2008), healthcare (Heath et al., 2014), military (Bartone, 2006), and sports (Galli & Vealey, 2008).

Seligman's 3Ps model of resilience

3Ps model is a most well-known positive psychology framework for resilience.

Humans often have three emotional reactions to adversity: personalization, pervasiveness, and permanence. Addressing these three, often automatic, reactions,

becoming more flexible, and developing stronger problem-solving skills will help us become more resilient and mature (Seligman, 1990).

Emotional Intelligence and resilience

The likelihood emotional intelligence (EI) and resilience are inter-linked, majority of the studies in this field indicate that higher EI individuals are also more resilient. Schneider et al. (2013) specially showed that EI supports anxiety resilience. It seems that the four EI skills: questioning assessments, increasing positive affect and decreasing negative affect, and testing physiology – facilitated resilient stress responses. Similarly, Magnano et al. (2016) presented that resilience is significantly influenced by EI. Similarly, Armstrong et al. (2011) found a connection between psychological resilience and emotional intelligence (EI).

Resilience is learnable expertise. If individuals put effort into it, one can become more emotionally resilient. The most important thing one can do to improve resilience is to train attention and awareness. As well as expanding resilience and emotional intelligence, zeroing in on this practice in preparing will decrease strain and uneasiness while likewise further developing work execution (Rehman et al., 2022).

Hypotheses

The hypotheses of the study were:

Ho: There is no significant effect of emotional intelligence on resilience among university students at undergraduate level.

Ho: There is no significant difference in emotional intelligence of students of public and private sector universities

Ho: There is no significant difference in emotional intelligence of students of male and female university students.

Material and Methods

Research Design

This research was quantitative in nature and casual comparative research design was used. It finds differences in existing behavior or status of groups and individuals (Gay et al., 2012).

Population

The students in the education departments of public and private universities of Lahore served as the population of the study. 2688 undergraduate students in total were enrolled in education departments of the selected universities, 1688 of them were from public universities and 802 were from private universities.

Sampling

A stratified random sampling was used to select the sample. By dividing the universities into public and private categories, strata were created. Total number of students in sample was 538 from which 299 were from public and 239 were from private universities.

Table 1
Sample size

Universities	Population (N)	Sample (n)
Public	1886	299
Private	802	239
Total	2688	538

Instruments

Data from participants was gathered through the use of questionnaires. The participants' demographic information (such as gender and institution type) was also gathered. Emotional intelligence scale developed by Schutte (1998) was used to measure emotional intelligence and scale developed by Wagnild and Young (1993) were used to measure resilience and to accomplish specific objectives of the study.

Emotional Intelligence

The emotional intelligence scale developed by Schutte (1998) was used to assess the students' emotional intelligence. There were 33 items in the questionnaire. Items were graded on a 5-point Likert-type scale, with 1 for a strong disagreement and 5 signifying a strong agreement. Items 5, 28, and 33 were scored in reverse.

Resilience Scale

The resilience scale developed by Wagnild and Young (1993) was used to investigate the resilience of the students. There were 25 items in the questionnaire. Things were reviewed on a 7-point Likert-type scale going from 1 to 7, with 1 denoting a disagreement and 7 as agreement.

Reliability of Scales

Reliability analysis showed the reliability of emotional intelligence questionnaire as 0.85 and 0.76 of resilience questionnaire. The detail of the factor wise reliability of the questionnaire is as follows

Table 2
Subscales of EI Scale

Sr#	Sub scales	Cronbach's alpha	No. of items
1	Perception of emotion	0.73	10
2	Managing own emotions	0.74	9
3	Managing other's emotion	0.76	8
4	Utilization of emotion	0.71	6

Results and Discussion

Table 3
Effect of EI on Resilience among University Students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.765 ^a	.585	.582	13.84492

a. Predictors: (Constant), UOE, POE, MOTE, MOWE

Table shows the result of regression analysis to check the effect of (independent variable) emotional intelligence by resilience (dependent variable). Fifty-eight percent variance is defined in the dependent variable of (resilience) by the independent variable emotional intelligence (R square of $.585 * 100 = 58.5\%$). R square in multiple regression showed variance that can be donated by all the independent variable in the progression. Independent variables that were studied in this research were Utilization of emotion, Perception of Emotion, Managing other's emotion, Managing own emotions.

Table 4
Multiple Regression Test Result

Model	Sum of Square	Df	Mean square	F	Sig.
Regression	143810.050	4	35952.512	187.563	.000 ^b
Residual	102166.458	533	191.682		
Total	245976.507	537			

a. Dependent Variable: RL

b. Predictors: (Constant), UOE, POE, MOTE, MOWE

Table shows the F ratio is employed to check how credible the measures are in forming a decent fit of model. The p-value $.000 < .05$, which directs a good fit of the model.

Table 5
Result of Multiple Regression Analysis for Coefficient

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
(Constants)	12.856	5.277		2.436	.015
POE	-.116	.154	-.026	-.751	.453
MOWE	.907	.176	.208	5.150	.000
MOTE	2.107	.192	.438	10.984	.000
UOE	1.565	.280	.242	5.583	.000

a. Dependent Variable: RL

Table shows the beta weights and statistical significance. The values of significance showed that all the factors of emotional intelligence (POE $p=.453$, MOWE $p=.000$, MOTE $p=.000$, UOE $p=.000$) significantly effect Beta values (POE, $B=-.116$, MOWE, $B=.907$, MOTE, $B=2.107$, UOE, $B=1.565$) indicate that the three factors of emotional intelligence like Managing own emotions, Managing other's emotion and Utilization of emotion have positive effect on resilience of university students except perception of emotion.

Table 6
Difference in EI of University Students on the Basis of Nature of Institute

Emotional Intelligence	N	Mean	Std. Deviation	t-value	df	Sig.
Public	299	125.8294	15.23246			
Private	239	122.2343	12.95481	2.957	533.921	.003

Table displays the outcome of independent sample t-test to test the hypothesis: there is no significant difference between emotional intelligence of university students on the basis of nature of institute. The t-value is 2.957 and the p-value is $.003 < .05$ at level

of significance which shows significant difference in EI of public and private undergraduate university students. So, the hypothesis is rejected. Mean value displays that students of public sector universities are showing more emotional intelligence than the students of private sector universities.

Table 7
Difference in EI of University Students on the basis of Gender

Emotional Intelligence	N	Mean	SD	t	df	Sig.
Male	15	124.5195	116.79878	.293	536	.796
Female	384	124.1172	13.28634			

Table displays the outcome of independent sample t-test to test the hypothesis; there is no significant difference between emotional intelligence of university students on the basis of gender. The t-value is .293 and the p-value is .769 > .05 at level of significance which shows no significant difference in EI of male and female university students. So, the null hypothesis is not rejected.

Discussion

This study sought to investigate the effect of emotional intelligence on resilience among undergraduate students. The results revealed a significant effect of students' emotional intelligence on resilience among undergraduate.

Furthermore, according to Naghavi and Redzuan (2011), girls have a greater understanding of emotions than boys do, and as a result, they are more accustomed to experience and express their emotions. Compared to boys who are unaware of their own or other people's emotions, girls are better familiar with the emotions.

The emotional intelligence of male and female students did not differ, according to the results. For instance, when emotional intelligence was tested in students in a study by Ciarrochi et al. (2001) female students scored higher than male students. Alumran and Punamaki (2008) examined the difference in emotional intelligence on gender and age among Bahrani pupils, it was discovered that female students performed better than male students. Bussey's and Bandura Social Theory (1999) contends that students pick up on the diverse behaviors of those around them. According to Travis (1997) this led to gender differences and stereotypes, such as the idea that men should behave more assertively, aggressively, and independently, while women should behave more tenderly, gently, emotionally, and reliantly. This idea emphasizes the expectation that girls will perform better on tests of emotional intelligence.

This study showed that students from public sector universities showed more emotional intelligence than students from private sector universities. The explanation might be that public universities offer superior instruction and hire a larger number of qualified and experienced faculty members; as a result, their students are more willing to work in teams, have more skill sets, and have a positive attitude towards their studies. The study's conclusions provided insight into the effects of traits like emotional intelligence and resilience; these possible effects were examined through the application of several statistical methods.

According to Schneider et al. (2013), emotional intelligence can increase a person's resilience. Research by Trapp (2010) and Dhamodharan and Ravikumar (2014) also demonstrated the positive effect of EI on resilience. Similar to this, research of Rehman (2022), EI has a positive effect on resilience.

Conclusion

The study made an effort to explore the effect of emotional intelligence on resilience among pupils at undergraduate level. It was observed that the independent variable (emotional intelligence) has positive effect on dependent variable (resilience). It was evident that the three factors of emotional intelligence like managing own emotions, managing other's emotion and utilization of emotion has positive effect on resilience.

According to the results, the emotional intelligence of male and female undergraduate students did not significantly differ from one another. Outcomes demonstrated significant difference in EI of public and private undergraduate university students.

Recommendations

It is necessary to develop educational programs that will help youth improve their emotional intelligence and resilience. It is also suggested to do qualitative research to explore the variables in depth. Institutions ought to consider forming a partnership with the Department of Education to implement projects that support the development of emotional intelligence. It is highly advised that academic institutions set up exclusive workshops and counseling programs for the students, providing a safe space for them to talk about their issues and develop their emotional intelligence. Results showed that public students have showing more emotional intelligence than private students. So, Institutions should also host talks by mentors, trainers, and inspirational speakers to raise students' emotional intelligence and build their resilience.

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