

**ASSOCIATION BETWEEN EMOTIONAL
INTELLIGENCE, ACADEMIC STRESS, AND
PHYSICAL HEALTH AMONG COLLEGE**



By

Hadia Maqsood

BSP191009

A Research Thesis submitted to the
DEPARTMENT OF PSYCHOLOGY

In partial fulfillment of the requirements for the degree of
BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Sciences
Capital University of Science & Technology,

Islamabad February, 2023

**ASSOCIATION BETWEEN EMOTIONAL
INTELLIGENCE, ACADEMIC STRESS, AND
PHYSICAL HEALTH AMONG COLLEGE
STUDENTS**



By

Hadia Maqsood

BSP191009

A Research Thesis submitted to the
DEPARTMENT OF PSYCHOLOGY

In partial fulfillment of the requirements for the degree of
BACHELOR OF SCIENCE IN PSYCHOLOGY

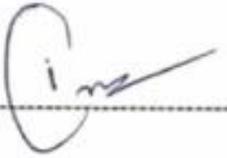
Faculty of Management and Social Sciences
Capital University of Science & Technology,

Islamabad February, 2023

CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "Association Between Emotional Intelligence, Academic Stress And Physical Health Among College Students" carried out by Hadia Maqsood, Reg. No. BSP191009, under the supervision of Miss Irum Noureen, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

Supervisor:



Miss Irum Noureen

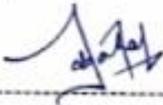
lecturer

Department of Psychology

Faculty of Management and Social Sciences

Capital University of Science & Technology, Islamabad

HoD:



Dr. Sabahat Haqqani

Assistant Professor

Department of Psychology

Faculty of Management and Social Sciences

Capital University of Science & Technology, Islamabad

Association between Emotional Intelligence, Academic Stress and Physical Health among

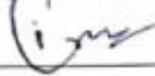
College Students

By

Hadia Maqsood

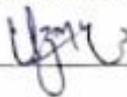
Registration # BSP191009

Approved By



Supervisor

Ms. Irum Noreen



Internal Examiner-I

Ms. Uzma Mushtaq



Internal Examiner-II

Ms. Sadaf Zeb



Thesis Coordinator

Ms. Irum Noreen



Head of Department

Dr. Sabahat Haqqani

Copyright © 2023 by CUST Student

All rights reserved. Reproduction in whole or in part in any form requires the prior written permission of Hadia Maqsood or designated representative.

*Dedicated to my blessed parents, family and adored siblings
whose tremendous support, cooperation and motivation led me to
this wonderful accomplishment*

DECLARATION

It is declared that this is an original piece of my own work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.



Hadia Maqsood

BSP191009

February 2023

ACKNOWLEDGEMENT

At the very outset I owe all of my heart-felt gratitude to the real Blesser of the universe, **ALLAH Almighty** the most Merciful and Beneficent and also to His **Holy Prophet “MUHAMMAD” (peace and blessings of Allah be upon him)** the real source of knowledge and torch of guidance for the entire world forever.

With deep reverence and sincerity, I feel great pleasure in expressing my heartiest gratitude to my Research supervisor, **Miss Irum Noureen**, for her dynamic supervision and constant encouragement during the process of accomplishment of this research work.

I am unable to express my deep admiration and illimitable sapience of appreciation from the core of my heart to my respectable and ever loving parents and siblings who experienced all ups and downs of my endeavor with patience.

Heartfelt thanks are extended to my sister **Dr. Komal Maqsood**, my brother **Dr. Muhammad Bilal**, and **Mr. Rana Muhammad Owais** for their accommodative attitude, consistent help and moral support through the course of this research project.

I feel pleasure in expressing my profound gratitude to my husband **Hannan Ahmed** and my friend **Hamna Nadeem** for their kind help and moral support in a lot of ways. May Allah Almighty bless all of them (AMEEN)

ABSTRACT

The aim of this study is to find out the relationship of emotional intelligence, academic stress and physical health. The emotional intelligence plays significant role in life of every person especially students when to understand and manage their emotions. The emotional part of intelligence is known as the capability of understanding and managing one's emotions positively for releasing stress, communicate efficiently, overcome challenges and to cope up with the conflicts (Dirges & Papoutsis, 2018). Academic stress is defined as the response to academic-related strains of students. The Physical health is defined as the state or condition not containing any illness or injury. It is a correlational study in which convenience sampling was done. Data was taken from students of different colleges of twin cities of the age between 16 to 19. Data was collected by using three scales that were brief emotional intelligence scale (BEIS), academic stress scales (ASS) and physical health questionnaire (PHQ). The result was analyzed by SPSS which shows that emotional intelligence has negatively correlated with academic stress and academic stress also negatively correlate with physical health. Academic stress has positive relationship with physical health. Gender differences was analyzed which says females scored higher mean value on these scales than males. private and public college differences was find out which show that private college students have higher academic stress than public students. , subject differences was analyzed which tell pre medical students are more stressed than other subjects. Results of study were explained with existing literature. Limitations and implications are also illustrated in discussion.

Keywords: emotional intelligence, academic stress, physical health, college students.

TABLE OF CONTENTS

CERTIFICATE OF APPROVAL.....	iii
DECLARATION	vii
ACKNOWLEDGEMENT	vii
ABSTRACT.....	ix
TABLE OF CONTENTS.....	x
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ACRONYM/ABBREVIATION	xiv
Chapter 1: Introduction	1
Literature Review.....	4
Theoretical Framework.....	6
Rationale	7
Objectives	8
Hypothesis.....	8
Chapter 2: Method	9
Research Design.....	9
Population and Sample	9
Sampling Technique	9
Instruments/ Tools	9

Data Collection Procedure	10
Chapter 3: Results	11
Chapter 4: Discussion	21
Conclusion	24
Limitations	24
Implications.....	25
References	26
Appendix A.....	29
Appendix B	30
Appendix C.....	31
Appendix D.....	32
Appendix E	34
Appendix F.....	37
Appendix G.....	40
Appendix H.....	41
Appendix I.....	41

LIST OF TABLES

Table 1: Frequency of the study variable (N=400).....	13
Table 2: Mean, standard deviation, ranges, skewness, kurtosis and descriptive statistics (N=400).....	16
Table 3: Pearson correlation between emotional intelligence, academic stress and physical health (N=400).....	17
Table 4: Mean standard deviation and independent sample t test values for gender differences (N=400).....	17
Table 5: Mean standard deviation and independent sample t test values for differences in private public college students (N=400).....	18
Table 6: One way analysis for subjects based study variables (N=400).....	19

LIST OF FIGURES

Figure 1: Emotional Intelligence Scale.....	14
Figure 2: Physical Health Scale	14
Figure 3: Academic Stress Scale.....	15

LIST OF ACRONYM/ABBREVIATION

Serial	Abbreviation	Description
1.	EI	Emotional Intelligence
2.	PH	Physical Health
3.	BMI	Academic Stress
4.	NPRS	Statistical Package for Social Sciences

CHAPTER 1- INTRODUCTION

Emotional intelligence and emotionally wellbeing are the key factors that directly impact the learning capabilities of students in academia. Emotions play a key role in defining the actions of an individual and thus being associated with the psychological aspect of the personality. In the modern academic environment, it is important for the educators to consider the emotional intelligence and emotional health of the students, so that they can overcome with the stressed situations and participate in learning process actively. The emotional part of intelligence is known as the capability of understanding and managing one's emotions positively for releasing stress, communicate efficiently, and overcome challenges and to cope up with the conflicts (Dirges & Papoutsis, 2018).

Emotional intelligence helps in associated with and helps in improving skills such as management, interpersonal relation, creativity, self-awareness, understanding, and learning. For personal growth, it is important for the students and professionals as well to have a better control over their emotions and underlying feelings, and regulate them so that the focus is on the self-improvement. Understanding, management of one's own emotions, and realizing the impact of these emotions on the one's own personality can be defined as emotional intelligence. Stress during the academic activities of the students is a growing cause that impacts their ability to participate in learning, and if not catered in timely manner can result in other psychological disorders and health problems. Thus there exists a strong relationship between the emotional intelligence and academic stress in colleges and universities.

Emotional Intelligence

Emotional intelligence is the ability to observe one's own and other people's emotions, to discriminate between diverse emotions and label them appropriately, and to use emotional information to guide cognitions of an individual and behavioral pattern. Emotional intelligence is generally explained as emotional consciousness, or the capability to recognize one's emotions and to harness emotions and relate them to tasks that can be as thinking and problem solving.

Emotional intelligence is known as the emotional information that precisely includes the evidence that is associated to the structure and regulation of emotions. Emotional intelligence has one of its principles that the response of the emotions can be logically reliable or unreliable with the concepts about the emotions (Mayer et al., 1995). Emotional intelligence is concerned with the capacity to carry the exact reasoning about the emotions and to handle those emotions and our knowledge about the emotions to enhance our cognitions. It is mental capability that practiced about the memory, recognition and the individual's capacity to reason about the specific amount of information that can be in verbal form (Mayer et al., 2008).

Capability to determine and analyze the emotions and to know about that how those emotions are impacting the people in the environment is also known as emotional intelligence. It also includes the perception about other people and how the other individuals are expressing and conveying their own emotions (Jassal, 2021).

Academic Stress

Academic stress is defined as the body's response to academic-related strains that exceeds adaptive capabilities of students. Stress is known as the internal or external response as physiological or psychological. It is the any type of change that a person may experience as it that can be in emotional or physical form. Academic stress refers to all kinds of things that trigger tension and strains, also known as stressors, that can be interpersonal, intrapersonal, social, related to health, environmentally also that impede academic growth in educational institutions. Academic stress is the psychophysiological response to stressful academic circumstances in which students are provoked during studying at schools or universities (Habibi et al., 2021).

Academic stress is also known as the unfavorable psychological conditions that generally happen due to environmental factors, such as educational prospects from parents, friends, teachers and family members, pressure for academic achievement, the burden of assignments and many more. Academic stress refers to a mental distress with respect to some predicted hindrance associated with academic failure or even an awareness of the probability of such failure.

A student interface with the academic stressors can be considered by dealings with environmental stressors, cognitive appraisal and coping strategies of the academic stressors, and then individuals psychological or physiological response to those stressors. A Students faces a lot of academic pressure as it is the school examination, showing progress in each subject, in class answering the questions, to work hard in tuition classes

at home also to score well, competition with other class fellows, fulfilling the good grades expectations of teachers' and parents' (Jassal, 2021).

Physical Health

The Physical health can be defined as the state or condition not containing any illness or injury. It can be extended to a diverse range of areas including healthy good diet, moderate weight recommended by BMI, personal hygiene and good sleep routine and many daily life cycles. Physical health is essential for overall well-being of an individual. Physical health is the well-being of the body and the proper functioning of the organism of individuals, as it is the normal condition for the individual who are not suffering from any type of disease and are physically and mentally stable (Nishat, 2022).

Physical health refers as a balanced between the surroundings and the proper bodily functioning as a whole. It is the active participation in the daily life practices and the activities socially accessible. It is the state of in which an individual is free from any type of disease at all levels or some painful situations. It is the bodily condition to be adjusted in any type of changing environment (Koipysheva et al., 2018).

Literature Review

A quantitative study was conducted on college students on both males and females in which relationship between emotional intelligence and academic stress was studied. The results showed a negative/indirect relation between academic stress and emotional intelligence (Jassal, 2021).

Another study was conducted on 855 participants to explore dimensions of emotional intelligence that are associated to mental and physical health and to its

behaviors. The result obtained was that the emotional intelligence dimensions are well interpreters of mental health then the physical health and are have less percentage to behaviors of health. The more defensive behaviors for health are carrying out by the older age people (Fern et al., 2015).

A study was conducted on the relationship of the physical activities, emotional part of intelligence and the general health in the Taiwan college students. The researchers have stated that the emotional intelligence is the main cause of the behavior change which can be associated with the low levels of the physical activity interventions. The purpose of the study was to study to compare the emotional intelligence, health related physical fitness, and health related quality of the life for the various level of the physical activity. The researchers concluded that the involvement in the physical activity can serve as an effective way for improving the physical, emotional and psychological health of college students (Li et al., 2009).

Stevens et al., (2019) conducted a study on 134 college male and females' students to know about the association between total trait emotional intelligence and academic stress. The result predicts the negative correlation between academic stress and the trait emotional intelligence. Bhochhibhoya et al., (2020) conducted research on undergraduate students to investigate the association between the emotional intelligence, mental health and physical activity. The results showed that emotional intelligence was a significant interpreter of physical activity and was exposed by the relation between physical activity and mental health.

A study was conducted on 365 individuals to know about the relationship of general physical and psychological health with characteristics of emotional intelligence. The result stated that there is a negative association between measures of emotional intelligence and poor general health (Tsaousis et al., 2005). A study was conducted on the association between psychological, social and physical health as a predictor with emotional intelligence. 184 University students were taken with both males and females. This study results showed that predictive values of emotional intelligence were related to all areas of health as physical and mental health (Extremera et al., 2006)

A cross sectional study was done on medical sciences male (31%) and female (65.8%) students to find out the association between academic stress and emotional intelligence for which 260 participants were recruited. The result indicates that there was no significant correlation among students between emotional intelligence score and the academic stress. There was significant difference between genders as females were having higher mean value than male students (Kermani et al., 2013).

A study was conducted on 200 high school students to find out the academic stress among private and government school students. Both male and female were recruited from private and public school equally. The result concluded that academic stress was higher than in males and it was also observed that private school students experienced more academic stress than government school students (Smritikana, 2016).

Theoretical Framework

The theoretical model for this study is the health belief model. The Health Belief Model (HBM) was developed by social psychologists (Hochbaum et al., 1950). This

model predicts the health related behaviors and also targets the emotional health challenges. The health belief model helps to promote and improve healthy behavior and treatments for it. It can be apply in this study as how physical health of a student can be affected by emotional intelligence and academic stressors of the students. If the student takes stress in of their studies their physical health will become poor and effected in a negative way.

Rationale

The main aim of this research study is to explore the actual relationship of emotional intelligence, academic stress and physical health. The emotional intelligence plays significant role in life of every person especially students when to understand and manage their emotions. Emotional intelligence is related to an individual capacity to deal with the stressors and when it comes to identify and understand their own emotions and of others as well.

Students are recognized as future for any nation (Deepa, 2016). Students at college level experienced pressure from the society for their academic activities and further studies. They are profound to be stressful at this age range and this time period. They experience more academic stress as they are at the stage of forming and shaping about their future. It is the crucial stage for all the students. Academic stress can affect their physical health also in their whole process but students don't take it seriously and not understand its importance. This study may investigate that how the student's emotional intelligence shows an essential role in their academics and physical health. This study is important as to spread awareness in students that how their emotional

intelligence can play an important role in their academic stress and impact their physical health.

Objectives

- To determine the relationship between emotional intelligence, academic stress, and physical health among college students.
- To explore the role of demographic variables (age, gender, education etc.) among emotional intelligence, academic stress and physical health.

Hypothesis

H1: There will be a negative relationship between emotional intelligence and academic stress among college students.

H2: There will be a negative relationship between emotional intelligence and physical health among college students.

H3: There will be negative relationship between academic stress and physical health.

H4: There will be significant Gender difference between emotional intelligence, academic stress and physical health among college students.

H5: there will be significant difference in private and public college students among study variables.

CHAPTER 2- METHOD

Research Design

This study was a correlational study in which the data was collected from a diverse population of students through questionnaires.

Population and Sample

The sample size of the population was 400 (n=400) which included both males and female's college students. There was no filtration on the basis of cast, ethnicity, and race. The sample was collected from different colleges of twin city.

Sampling Technique

The sampling technique used for this study was convenient sampling technique.

Instruments/ Tools

The data was collected using following tools:

a) **Brief Emotional Intelligence Scale (BEIS-10)**

BEIS was developed by Davies et al., (2010). It is a 10 item Likert type questionnaire. The questions will be answered in the form of 1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree. This scale is revised version of EIS. It has alpha reliability of 0.74.

b) **Physical Health Questionnaire (PHQ)**

PHQ was developed by Schat et al., (2005). It is a 14 item Likert type scale. The questions will be answered in the form of 1 = not at all, 2 = rarely, 3 =

once in a while, 4 = some of the time, 5 = fairly often, 6 = often, 7 = all of the time. The reliability of this scale is above alpha 0.75.

c) Academic Stress Scale (ASS)

ASS was developed by kaliappan et al., (1991). It has 40 items and it is Likert type scale from points 1 to 5. The options include of no stress, slight stress, moderate stress, high stress and extreme stress. The alpha reliability of ASS is 0.76.

Data Collection Procedure

To collect data, the permission was taken from the university authority. The participants were recruited from Islamabad colleges. The informed consent was given to the participants about the research topic. The college students were selected both males and females. The scales were given to the participants to fill the particular questionnaires with their permission. All the ethical guidelines were followed.

Inclusion criteria

Those individuals were eligible for this study who meets the following criteria:

- Age: Between 16-19 years.
- Both genders of males and females were included.

Exclusion criteria

Individuals who had physical or psychological disabilities that can hinder them to participate in the study were not included.

Ethical Considerations

The informed Consent from the participants was taken and the Privacy of participants in the study was considered. They were communicated briefly about the topic and the research study design. All the ethical guidelines of American Psychological Association (APA -7) were followed as by rules.

Data Analysis

Analysis was done by SPSS to know about the association between emotional intelligence, academic stress and physical health among college students. For analysis, Pearson correlation was applied. Independent sample t test was applied for the private and public college differences and gender differences for college students. ANOVA was applied for subject differences among college students.

CHAPTER 3- RESULTS

This study explored the association between emotional intelligence, academic stress and physical health among college students. In this section, the demographical characteristics are explained and the result is executed. For the analysis, to examine the hypothesis of the study SPSS was used. Mean, median, standard deviation, alpha and range was find out by descriptive frequencies. Correlation was found through Pearson. Independent sample t test and one way ANOVA was applied for demographics to know about the emotional intelligence, academic stress and physical health relationship among college students. The sample taken was 400 college students from Islamabad and Rawalpindi colleges.

Table 1
Frequency of the study variable (N=400)

Variable		<i>f</i>	%
Gender	Male	66	16.5
	Female	334	83.5
College	Private	145	36.3
	Public	255	63.8
Physical disease	Yes	4	1
	No	396	99
Subject's	Pre medical	147	36.8
	Pre engineering	81	20.3
	Arts	91	22.8
	ICS	81	20.3

Note: *F=frequency, %=percentage*

Table 1 shows the frequency and percentages of the demographics of the study. The results show that males were more than in females in frequency. In colleges section, there were more public college students than the private college students. The frequency in subjects varies as pre medical students were higher than all other subjects that are pre engineering, arts and ICS.

Normal Distribution of Sample

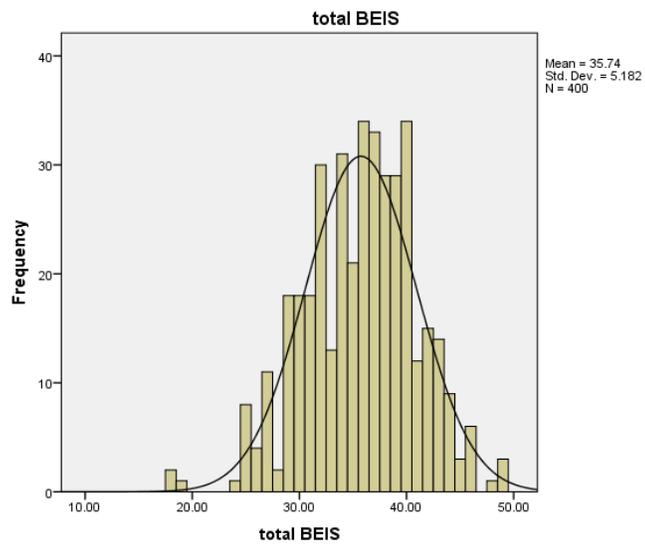


Figure 1: emotional intelligence scale

Figure 1 shows that Emotional intelligence scale is normally distributed. Skewness and kurtosis values described that data was normally distributed.

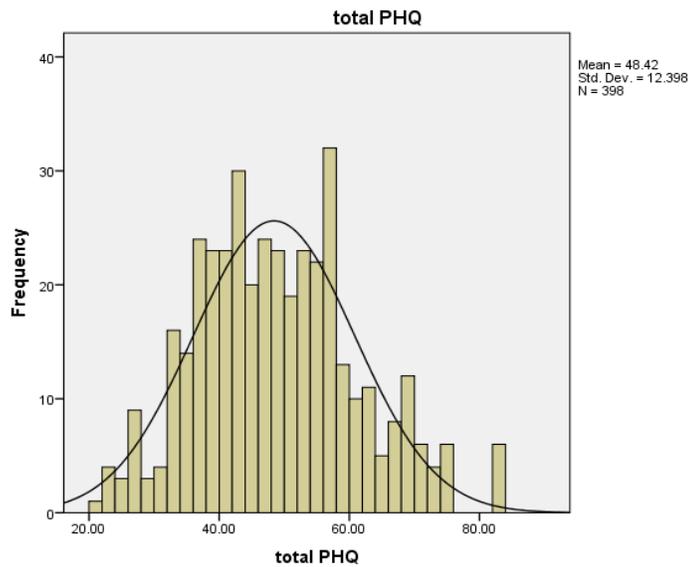


Figure 2: Physical Health Scale

Figure 2 shows that Physical health scale is normally distributed. Skewness and kurtosis values described that data was normally distributed.

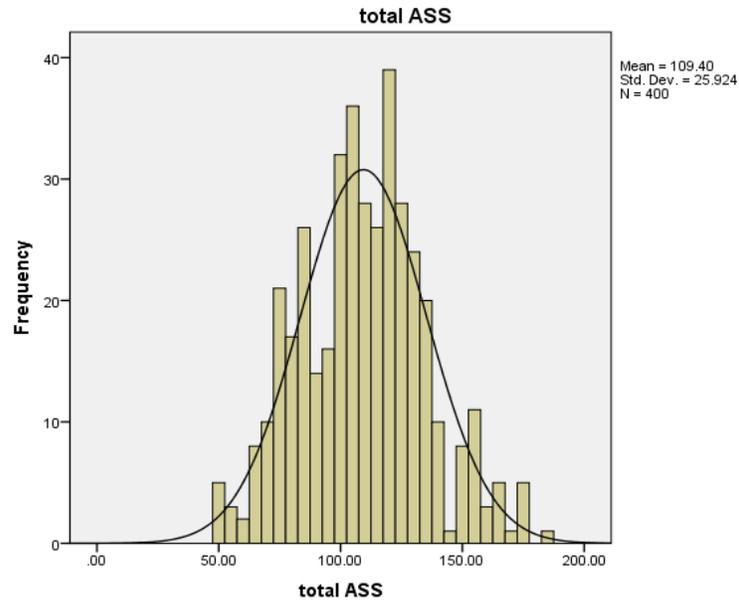


Figure 3: Academic Stress Scale

Figure 3 shows that Academic stress scale is normally distributed. Skewness and kurtosis values described that data was normally distributed.

Table 2*Mean, standard deviation, ranges, skewness, kurtosis and descriptive statistics (N=400)*

variables	items	a	M	Med	SD	Ranges		skew	kurt
						potential	actual		
EI	10	.54	35.74	36	5.18	10-50	18-49	-.26	.20
AS	40	.92	109.39	109	25.92	40-200	50-187	.33	-.16
PH	14	.75	48.38	48	12.39	14 -98	21-82	.14	-.12

Note: EI= Emotional Intelligence, AS=Academic Stress, PH= Physical Health.

In table 2, the descriptive were carried out. Mean value was scored higher in academic stress scale than the emotional intelligence and physical health. Median value is scored higher in academic stress than physical health and academic stress respectively. Alpha values of emotional intelligence are .54. The alpha reliability of academic stress is .92 and reliability of physical health is .75.

Table 3

Pearson correlation between emotional intelligence, academic stress and physical health (N=400).

Variable	M	SD	EI	AS	PH
EI	35.74	5.18	-	-.090	-.044
AS	109.39	25.92		-	.451**
PH	48.38	12.39			-

Correlation is significant at 0.01level (2 tailed).

Note: EI= Emotional Intelligence, AS=Academic Stress, PH= Physical Health.

In the table 3, Pearson correlation was done and the results show that emotional intelligence is negatively correlated with academic stress. Emotional intelligence has negative relationship with physical health. Academic stress has significant positive relationship with physical health.

Table 4

Mean standard deviation and independent sample t test values for gender differences (N=400)

variables	Male		Female		t	p	95%CI		Cohen's
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL	
EI	35.3	4.77	35.83	5.26	-.758	.44	-1.90	.843	0.10
AS	105.48	27.74	110.17	25.52	-1.34	.18	-11.54	2.17	0.17

PH	44.62	11.51	49.13	12.44	-2.72	.00	-7.76	-1.25	0.37
-----------	-------	-------	-------	-------	-------	-----	-------	-------	------

Note: EI= Emotional Intelligence, AS=Academic Stress, PH= Physical Health.

Table 4, explains the differences of mean scores and significance level of males and females on each scale. The significant difference is observed on the scales of physical health of males and females. There is non-significant difference of male and female on emotional intelligence and academic stress scale. Cohen's d value for these scales is 0.10, 0.17, and 0.3 respectively. The mean value for female are higher than of male on these scales as emotional intelligence, academic stress and physical health.

Table 5

Mean standard deviation and independent sample t test values for differences in private public college students (N=400)

Measures	private		public		t	p	95%CI		Cohen's
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL	
EI	34.93	5.11	36.20	5.17	-2.36	.01	-2.31	-.212	0.24
AS	112.01	25.31	107.90	26.19	1.52	.12	-1.18	9.39	0.15
PH	48.83	10.95	48.13	13.16	.54	.58	-1.18	3.23	0.05

Note: EI= Emotional Intelligence, AS=Academic Stress, PH= Physical Health.

Table 5 explains the differences of mean scores and significance level of private and public colleges on each scale. There is significant difference on the scale of emotional intelligence. There is non-significant difference of private and public colleges on academic stress and physical health scale. Cohen's d value for these scales is 0.24, 0.15, and 0.05 respectively. The mean value for public college is higher than of private colleges on the emotional intelligence scale. Academic stress mean scored higher on the private college than of public. Physical health mean value is scored higher in private colleges than in public.

Table 6

One way analysis for subjects based study variables (N=400)

Variables	Pre Eng.		Pre med		Arts		ICS		F	P	η^2
	M	SD	M	SD	M	SD	M	SD			
EI	35.50	5.30	35.55	5.09	37.27	5.55	34.61	4.41	4.14	.00	.03
AS	111.19	27.75	112.08	28.15	101.01	23.75	12.14	19.92	4.23	.00	.03
PH	48.65	11.81	49.68	11.98	46.05	13.92	48.38	11.72	1.63	.18	.01

Note: EI= Emotional Intelligence, AS=Academic Stress, PH= Physical Health, pre Eng. = pre engineering, pre-med= pre medical.

Table 6 describes that there is significant difference on emotional intelligence and academic stress for pre medical, pre engineering, arts and ICS. There is non-

significant difference on physical health scale. On the emotional intelligence, results are significant. Results indicate that arts students have higher mean value than the pre medical, pre engineering and ICS. On academic stress scale, results are significant. A result shows that pre medical students have higher mean score than the pre engineering, arts and ICS. On physical health scale, result is non-significant and it shows that pre medical students have high mean score than the pre engineering, arts and ICS.

CHAPTER 4- DISCUSSION

The aim of this research study was to find out the association between emotional intelligence, academic stress and physical health impact on college students. Emotional intelligence is the capability of understanding and managing one's emotions positively for releasing stress, communicate efficiently, and overcome challenges and to cope up with the conflicts (Dirges & Papoutsis, 2018). Academic stress is defined as the response to academic-related strains of students. The Physical health is defined as the state or condition not containing any illness or injury. The sample of the study was 400 college students (males, n=66; females, n=334) as shown in descriptive (see table 1). Three scales were used that are brief emotional intelligence scale (BEIS) academic stress scale (ASS) and physical health questionnaire (PHQ). Data was analyzed with the help of SPSS by using Pearson correlation. On the other hand the independent t tests were applied to find out the gender differences and the differences between private and public colleges. ANOVA was carried out to know about the differences in subjects of college students.

Three scales were used in the study the alpha coefficient reliability of the brief emotional intelligence scale (BEIS) was 0.54. The second scale used was academic stress scale (ASS) having alpha reliability of 0.92. The third scale applied was physical health questionnaire (PHQ) was 0.75. In the present study the correlation coefficients were carried out as shown in table 3. It was hypothesized in the study that there is negative relationship between emotional intelligence and academic stress among college students. The hypothesis was accepted. The correlation find out from SPSS was consistent as

previous literature justifies in a study conducted on college male and female students in which relationship between emotional intelligence and academic stress was studied. The results showed a negative/indirect relation between academic stress and emotional intelligence (Jassal, 2021) which is supported by the given results.

The second hypothesis was that there will be a negative relationship between emotional intelligence and physical health and hypothesis was accepted which is consistent as previous literature proved in a study which was conducted on undergraduate students to investigate the association between the emotional intelligence, mental health and physical activity. The results showed that emotional intelligence was a significant interpreter of physical activity and was exposed by the relation between physical activity and mental health (Bhochhibhoya et al., 2020) which is supported by the results.

According to previous research studies it was hypothesized in this current study that there will be a negative relationship between academic stress and physical health. The hypothesis was rejected and the result shows that there will be a positive relationship between academic stress and physical health. It is justified as college students not take their physical health very seriously or give importance to it. College students are in adolescence age in which they are unconcerned and carefree from their physical health and do not worry about it or give attention.

The independent sample t test was applied to test gender differences that are shown in table 4. The result shows that female college students have higher emotional intelligence, academic stress and physical health as shown in table 4. There is significant difference on physical health scale. Non-significant differences were shown on academic

stress and physical health questionnaires. As previous literature is consistent to it and proved that in a study that was done on medical sciences students' male (31%) and female (65.8%) students to find out the association between academic stress and emotional intelligence for which 260 participants were recruited and the result shows that there was significant difference between genders as females were having higher mean value than male students (Kermani et al., 2013).

The independent sample t test was applied to find out the differences between private and public colleges as shown in table 5. The findings show that there is non-significant difference of private and public colleges on academic stress and physical health scale. The mean value for public college is higher than of private colleges on the emotional intelligence scale. Academic stress mean scored higher on the private college than of public as literature justifies in study that was conducted on 200 high school students to find out the academic stress among private and government school students. Both male and female were recruited from private and public school equally. The result concluded that academic stress was higher than in males and it was also observed that private school students experienced more academic stress than government school students (Smritikana, 2016). Physical health mean value is scored higher in private colleges than in public.

ANOVA was applied on the subject's differences on male and female college students as shown in table 6 which explains that there is significant difference on emotional intelligence and academic stress for pre medical, pre engineering, arts and ICS. There is non-significant difference on physical health scale. On the emotional intelligence

scale results are significant and it shows that the arts students have high mean value than the pre medical, pre engineering and ICS. On academic stress scale results are significant and it shows that pre medical students have higher mean score than the pre engineering, arts and ICS. On physical health scale, the results are non-significant and it shows that pre medical students have high mean score than the pre engineering, arts and ICS. This result in this study is the new approach as no much research evidence is found on subject variation among college students.

Conclusion

The association between emotional intelligence, academic stress and physical health was find out and the result concluded that there is a negative relationship between emotional intelligence and academic stress. There is a negative relationship between emotional intelligence and physical health. There is positive relationship between academic stress and physical health. There are Gender differences between emotional intelligence and academic stress. Private college students experienced more academic stress than public college students. Results also revealed that there is significant difference on emotional intelligence and academic stress for pre medical, pre engineering, arts and ICS and there is non-significant difference on physical health scale.

Limitations

College students were only the target of the study of the specific age range. The data was collected from more females than males. There is a need to study long term or longitudinal effects of emotional intelligence on academic stress and physical health.

Implications

This study will help in to examine that how a person emotional intelligence can affect our academic process and how the stressors can play an important role in our life. It will give awareness to youth about how academic stress can impact on student's physical health and emotional intelligence. Students are the building blocks for any nation so it is vital that students must be emotionally stable and for that their academic stress should be reduce. Their academic problems must be discussed with the parents and teacher. They must be properly guided the path they want to followed in their future to adopt any stream of their interest.

REFERENCES

- Bhochhibhoya, A., Branscum, P., Taylor, E. and Hofford, C., 2020. Exploring the relationships of physical activity, emotional intelligence, and mental health among college students. *American Journal of Health Studies*, 29(2).
- Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). Validity and reliability of a Brief Emotional Intelligence Scale (BEIS-10). *Journal of Individual Differences*, 31(4), 198–208. <https://doi.org/10.1027/1614-0001/a000028>
- Deepa (2016). Relationship of emotional intelligence and academic stress among college students. *Journal of Education and applied social sciences*, 7(3), 77-86. <https://doi.org/10.1003/smi.1054>
- Drigas, A. and Papoutsis, C., 2018. A new layered model on emotional Intelligence. *Behavioral Sciences*, 8(5), p.45.
- Extremera, N., & Fernández-Berrocal, P. (2006). Emotional intelligence as predictor of mental, social, and physical health in university students. *The Spanish Journal Of Psychology*, 9(1), 45-51. <https://doi.org/10.1017/s1138741600005965>
- Fernández-Abascal, E. and Martínez-Díaz, M., 2015. Dimensions of emotional intelligence related to physical and mental health and to health behaviors. *Frontiers in Psychology*, 06.
- Habibi Asgarabad, M., Charkhabi, M., Fadaei, Z., Baker, J. and Dutheil, F., 2021. Academic expectations of stress inventory: a psychometric evaluation of validity

and reliability of the Persian version. *Journal of Personalized Medicine*, 11(11), p.1208.

Jassal, N., 2021. Relationship between Academic Stress and Emotional Intelligence in High School Students. *Psychology and Cognitive Sciences – Open Journal*, 7(1), pp.30-35.

Kermani, T., Khoshbakht, H., Miri, M. R., & Moodi, M. (2013). The relationship between emotional intelligence and academic stress in students of Medical Sciences. *Journal of Education and Health Promotion*, 2(1), 40. <https://doi.org/10.4103/2277-9531.115836>

Koipysheva*, E., Lebedinsky, V., & Koipysheva, M. (2018). Physical Health (Definition, Semantic Content, Study Prospects. *The European Proceedings Of Social And Behavioural Sciences*. <https://doi.org/10.15405/epsbs.2018.12.73>

Li, G., Lu, F. and Wang, A., 2009. Exploring the Relationships of Physical Activity, Emotional Intelligence and Health in Taiwan College Students. *Journal of Exercise Science & Fitness*, 7(1), pp.55-63.

Mayer, J., Roberts, R., & Barsade, S. (2008). Human Abilities: Emotional Intelligence. *Annual Review Of Psychology*, 59(1), 507-536. <https://doi.org/10.1146/annurev.psych.59.103006.093646>

Nishat, N., 2022. Physical Health Definition: What Does Physical Health Mean? online The World Book.

- Schat, A. C. H., Kelloway, E. K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): Construct Validation of a Self-Report Scale of Somatic Symptoms. *Journal of Occupational Health Psychology, 10*(4), 363–381. <https://doi.org/10.1037/1076-8998.10.4.363>
- smirtikana, M. (2016). Academic stress among government and private high school students. *The international Journal of Indian psychology, 2*(1), 40. <https://doi.org/18.01.147/20160302>
- Stevens, C., Schneider, E., Bederman-Miller, P., & Arcangelo, K. (2019). Exploring the relationship between emotional intelligence and academic stress among students at a small, private college. *Contemporary Issues In Education Research (CIER), 12*(4), 93-102. <https://doi.org/10.19030/cier.v12i4.10322>
- Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress And Health, 21*(2), 77-86. <https://doi.org/10.1002/smi.1042>

APPENDIX A

Consent Form

I am Hadia Maqsood a B.S psychology student from Capital University of Science and Technology. I am doing a research which is a requirement of my degree. The title of my research is association between emotional intelligence, academic stress and physical health among college students.

I hereby request you to take part in this study. In order to participate in this research, you have to fill out the given questionnaires. Your participation in this research is voluntary and your information will be kept confidential. Your name will not be mentioned anywhere. If you want to withdraw from this study it will be your choice and no questions will be asked but it will be a great contribution if you participate and give your honest responses.

For any query about the study, please contact at:

Email: hadiamaqsood15@gmail.com

Signature of participant

Thankyou

APPENDIX B

Demographic Information

Please provide the given information

Gender: Male/Female

Previous exam percentage:

College: Private\public

Any physical disease: Yes/No

Subjects:

- Pre-Engineering
- Arts
- Pre-Medical
- ICS

APPENDIX C

Brief Emotional Intelligence Scale (BEIS)

Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel right now, that is, at this moment. The numbers indicates as given below the following. Strongly disagree= 1, Disagree=2, neither agree or nor disagree=3, Agree=4, Strongly Agree=5.

	Items	(1)	(2)	(3)	(4)	(5)
1.	I know why my emotions change.					
2.	I easily recognize my emotions as I experience them.					
3.	I can tell how people are feeling by listening to the tone of their voice					
4.	By looking at their facial expressions, I recognize the emotions people are experiencing					
5.	I seek out activities that make me happy					
6.	I have control over my emotions					
7.	I arrange events others enjoy					
8.	I help other people feel better when they are down					
9.	When I am in a positive mood, I am able to come up with new ideas					
10.	I use good moods to help myself keep trying in the face of obstacles					

APPENDIX D

Physical Health Questionnaire (PHQ)

The following items focus on how you have been feeling physically during the past period of time. Please respond it under the following appropriate numbers. Not at all=1,rarely=2,once in a while=3,some of the time=4,fairly often=5,often=6,all of the time=7.

Items	1)	2)	3)	4)	5)	6)	7)
How often have you had difficulty getting to sleep at night?							
How often have you woken up during the night?							
How often have you had nightmares or disturbing dreams?							
How often has your sleep been peaceful and undisturbed?							
How often have you experienced headaches?							
How often did you get a headache when there was a lot of pressure on you to get things done?							
How often did you get a headache when you were frustrated because things were not going the way they should have or when you were annoyed to someone?							
How often have you suffered from an upset stomach (indigestion)?							
How often did you have to watch that you ate carefully to avoid stomach upsets?							

	How often did you feel nauseated (“sick to your stomach”)							
	How often were you constipated or suffered from diarrhea?							
	How many times have you had minor colds (that made you feel uncomfortable but didn’t keep you sick in bed or make you miss work?)							
	How many times have you had respiratory infections more severe than the colds that “laid you low” (such as bronchitis, sinusitis, etc?)							
	When you had a bad cold or flu, how long does it last?							

APPENDIX E

Academic Stress Scale (ASS)

If you feel No Stress put a 'Tick' mark in the 1st bracket (NS), Slight Stress in the 2nd (SS), Moderate Stress in the 3rd (MS), High Stress in the 4th (HS) and you feel Extreme Stress put a 'II' mark in the 5th bracket (ES).

Sr.	Items	NS)	SS)	MS)	HS)	ES)
1.	Teachers make too many extra demands on students.					
2.	Poor interest in some subjects.					
3.	Progress reports to parents.					
4.	The teacher is not humours towards us.					
5.	Lack of concentration during study hours.					
6.	Difficulty in remembering all that is studied.					
7.	Worrying about the examinations.					
8.	Lack of self-confidence.					
9.	The teachers do not listen to our ideas.					
10.	Conflict with friends/college authorities.					
11.	Teachers give more punishment in the class.					
12.	Worry about results after examinations.					
13.	Hesitate to ask the teacher for detailed explanation.					

14.	Biased attitude of the teacher.					
15.	Inadequate space or room for study at home.					
16.	Not knowing how to prepare for the examinations.					
17.	Lack of assertiveness (confidence) in the class.					
18.	Lack of opportunity to meet teachers.					
19.	Teacher shows socio-economic status on students.					
20.	Slow in getting along with the curriculum.					
21.	Exam papers are tough and not valued well.					
22.	Unable to complete the assignment in time.					
23.	Lack of communication between teachers and students.					
24.	Monotonous (boring or tedious) teaching style by the teacher.					
25.	Not enough discussion in the class.					
26.	Lack of mutual help among classmates.					
27.	Lack of fluency while speaking the language other than the mother tongue.					
28.	Difficulty in public speaking.					
29.	The teacher is fast and does not use blackboard legibly.					
30.	Teachers lacking interest in students.					
31.	Examination syllabus is too heavy in some subjects.					
32.	Feeling of inferiority.					
33.	Unable to discuss Academic failures with parents.					
34.	Not able to grasp the subject matter.					

35.	Incomplete and confusing study material.					
36.	Eleventh hour preparation for the examinations.					
37.	Importance of the subject matter.					
38.	Difficulty in adjusting with opposite gender.					
39.	Inadequate subject knowledge of the teacher.					
40.	Inadequate lab and library facilities.					

Appendix F



Capital University of Science & Technology
Islamabad

Islamabad Expressway, Kahuta Road,
Zone - V, Islamabad, Pakistan
Telephone : +92-51-111-555-666
 : +92-51-4486700
Fax : +92-51-4486705
Email : info@cust.edu.pk
Website : www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-165
October 5, 2022

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Hadia Maqsood, registration number **BSP191009** is a bona fide student in BS Psychology program at this University from Spring 2019 till date. In partial fulfillment of the degree, she is conducting research on "Association between emotional intelligence, academic stress, and physical health among college students". She is required to collect data from your institute.

Your cooperation is highly appreciated. Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani
Head, Department of Psychology
Ph no. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk

Appendix G

ORIGINALITY REPORT

19%

SIMILARITY INDEX

15%

INTERNET SOURCES

9%

PUBLICATIONS

11%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Higher Education Commission Pakistan Student Paper	2%
2	jurnal.unai.edu Internet Source	2%
3	pr.hec.gov.pk Internet Source	1%
4	dspace.cus.ac.in Internet Source	1%
5	www.ncbi.nlm.nih.gov Internet Source	1%
6	www.researchgate.net Internet Source	1%
7	Submitted to Adtalem Global Education, Inc. Student Paper	1%
8	Jayalakshmi V., Aravindakshan M.. "chapter 10 Effect of an Emotional Intelligence Intervention Program on Coping Strategies	1%

Appendix H

10/6/22, 9:13 PM

Gmail - request for a permission



Hadia Maqsood <hadiamaqsood15@gmail.com>

request for a permission

2 messages

Hadia Maqsood <hadiamaqsood15@gmail.com>
To: "schata@mcmaster.ca" <schata@mcmaster.ca>

Tue, Sep 27, 2022 at 11:24 PM

Dear Aaron Schat ,
I hope this email finds you well! I am a student of Capital University of Science and Technology Islamabad Pakistan, majoring in Psychology as a Bachelor's degree. As a part of my studies , I am working on a research thesis (Association between emotional intelligence, academic stress and physical health among college students). For this study, one of the scales (PHQ ; Schat et al.,2005) will be used. I request you to grant me the permission to use that scale in my study.
I am looking forward to your valuable response.

Thank you!

Sincerely,
Hadia Maqsood

Schat, Aaron <schata@mcmaster.ca>
To: Hadia Maqsood <hadiamaqsood15@gmail.com>

Tue, Sep 27, 2022 at 11:49 PM

Hello Hadia,

Thank you for your email. You are welcome to use the PHQ for your research.

I should clarify that I and my colleagues (Kevin Kelloway & Serge Desmarais) did some validation and minor refinements to the PHQ, but it was based on a measure originally developed by Spence, Helmreich, & Pred (1987 paper in the Journal of Applied Psychology, cited in our 2005 paper on the PHQ).

I am attaching a copy of the 2005 paper (which contains the scale in the appendix) and a copy of the English version of the scale in MS word format in case that is helpful to you).

Several other researchers from India and Pakistan have reached out to me about the measure. I am not sure if the language they used is what you are looking for, but you could reach out to them as well. They are:

iram.naz@uog.edu.pk (I believe this version was translated into Urdu)

Dania Malik daniamalik986@gmail.com

Salbia Abbas salbia.abbas@gcwus.edu.pk

Are you willing to send me a copy of your translation of the scale when it is completed? I am not able to speak or read the language, but I try to retain copies of all translations of my measures, in case other researchers subsequently ask for particular versions/translations of the scale. If you do send me a copy of

Appendix I

10/6/22, 9:12 PM

Gmail - request for a permission



Hadia Maqsood <hadiamaqsood15@gmail.com>

request for a permission

2 messages

Hadia Maqsood <hadiamaqsood15@gmail.com>
To: "t.devonport@wlv.ac.uk" <t.devonport@wlv.ac.uk>

Tue, Sep 27, 2022 at 11:39 PM

Dear ,
I hope this email finds you well! I am a student of Capital University of Science and Technology Islamabad Pakistan, majoring in Psychology as a Bachelor's degree. As a part of my studies , I am working on a research thesis (Association between emotional intelligence, academic stress and physical health among college students). For this study, one of the scales (BEIS ;Davies et al.,2010) will be used. I request you to grant me the permission to use that scale in my study.
I am looking forward to your valuable response.

Thank you!

Sincerely,
Hadia Maqsood

Devonport, Tracey <T.Devonport@wlv.ac.uk>
To: Hadia Maqsood <hadiamaqsood15@gmail.com>

Wed, Sep 28, 2022 at 12:14 PM

Dear Hadia,

This is a free to use measure that you are welcome to use. I attach the validation paper and the measure itself. This measure was developed from the original EIS developed by Schutte et al.

We do not have normative data and in terms of scoring you can either calculate and use a total score or calculate the two items for each of the five factors (see Table 4).
Best wishes with your research.

Tracey

Tracey Devonport (PhD, CPsychol, CSci, FBASES, FHEA)
BASES accredited sport scientist (scientific support)
HCPC registered sport and exercise psychologist

Professor of Applied Sport and Exercise Sciences,
Faculty of Education, Health and Wellbeing,
School of Sport,
University of Wolverhampton,
Gorway Road,
Walsall,
WS1 3BD
Tel: 01902 323113

Twitter: @TjDevonport
Staff Profile: <https://researchers.wlv.ac.uk/T.Devonport>