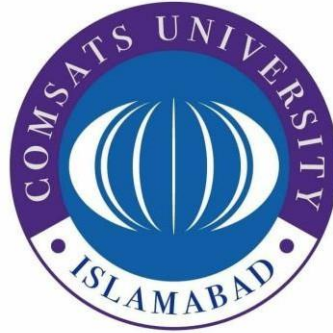**Mindfulness, Optimism, and Mental Health of University Students during Covid-19**

Submitted by

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DEPARTMENT OF HUMANITIES

COMSATS UNIVERSITY ISLAMABAD, LAHORE CAMPUS

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CAMPUS 2020

Research Completion Certificate

Certificate that the research work contained in this thesis titled "Mindfulness, Optimism, and Mental health of University Students during Covid 19" has been carried out and completed by **Mr. Muhammad Usman Ashraf Student ID: FA15-BPY-012**; Student BS Psychology, session 2017 – 2021, under my supervision. This study is an independent research work and carried out under given instruction and consideration.

Dated: _____

_____   _____

Ms. Zainab Raza   **External Examiner**

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Declaration

I, Mr. Muhammad Usman Ashraf , Student ID: FA15-BPY-012, student of BS in the subject of Psychology, session of 2017-2021, hereby declare that the material printed in this thesis titled "Mindfulness, Optimism, and Mental Health of University Students during Covid-19" is original work and has not been printed, published or submitted as research work, thesis or publication in any form in any university, research institution in Pakistan or abroad.

Dated: _____   _____

Signature of Declarer

Dedication

This thesis is dedicated to my beloved parents; Muhammad Ashraf and Jamila khushi Muhammad, and my mentor and supervisor Ms. Zainab Raza for their care, love, support and encouragement in completing my thesis.

Acknowledgement

In the name of Allah, the Most Gracious and the Most Merciful Alhamdulillah, all praises to Allah for the strengths and His blessing in completing this thesis. Special appreciation goes to my supervisor, Ms. Zainab Raza, for his supervision and constant support. His invaluable help of constructive comments and suggestions throughout the experimental and thesis works have contributed to the success of this research.
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Muhammad Usman Ashraf

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Abstracts

The purpose of the current study was to investigate the relationship between mindfulness, optimism, and mental health of University Students during Covid-19 . It was hypothesized that there is a relationship between mindfulness, optimism, and mental health (anxiety, stress, and depression) of university students. A correlational research design was used in this study. The sample of 224 students (male=89, female=135) was taken from online google form. Different scales were used i.e. Mindfulness Attention Awareness Scale, Optimism Life Orientation Scale and Mental Health DAAS Scale to assess the Mindfulness, Optimism and Mental health in university students. Pearson Product Moment Correlation Analysis and hierarchal regression was used to assess study objectives. According to results, there is negative relationship between optimism and mental health (stress, anxiety, and depression) in university students. Mindfulness negatively predicts stress, anxiety, and depression in university students. Optimism negatively predicts stress and depression in university students. Limitations, implications, and future directions of the current study were discussed.

Key Words: Mindfulness, Optimism, Mental health, Covid, University Student

Introduction

COVID-19 is a health risk identified as a major stressor threatening many people around the world's mind and wellbeing (Brooks et al. 2020; Bhuiyan et al. 2020; Satici et al. 2020). It has been suggested that COVID-19 stress can cause psychosocial problems such as depression, emotional dysregulation, and anxiety at mild to severe levels (Arslan and Yıldırım 2020; . Recent reports have shown that students have experienced serious behavioral and mental health problems, including anxiety and depression. Researchers in mental health urgently and rigorously have requested a solution to problems of mental health and concrete ways of preventing emerging COVID-19 problems. (Vizoso, et al., 2019).

In this respect, mental health disorders and well-being in crisis times can play a key role as well as psychological strengths such as mindfulness and optimism. The aiming at examining the purpose of optimism and mental health regarding the relationship between stress in the coronavirus and suffered through an outbreak among secondary students. In this study we will talk about how mental health, mindfulness and optimism about the future will affect university students (Viafora, et al.,2015).

It was the first time that Pakistan experienced pandemic it infected so many people. In view of China's role, Pakistan also followed these instructions and moved towards a lockout in the country. The WHO's preventive directives were published on macro level for the lives of the people. The lockdown was a new experience that wasn't taken by the people seriously, but the seriousness of this infectious disease was noticed at first, as well as an increase in the number of patients and the death toll. All organizations, educational institutions, parks, shopping malls and cinema were shut down until additional government orders were received. Only state executive and hospital departments were left open. The lives of the

people stagnated in this situation. Some people particularly students, had a sudden vacation in the beginning, enjoyed this lockdown. However after more than a month's lock-down, fun has shifted to anxiety, frustration, stress, attack, rivalry, holiness, insomnia, loneliness, etc. Even with mobile phones they have fed up. While they had online classes, they still did. Their problems have kept on. COVID-19 is a new pandemic for Pakistanis of different sizes in comparison to earlier viral infections. Research on Pakistani university students' psychological experiment during COVID-19 lockdown was therefore needed. This study thus aims to explore and understand university students' mental health during lockouts (Zimmaro, et al.,2016).

Mindfulness

Mindfulness is a state of mind that many philosophical and spiritual contemplation traditions have maintained for the students, but which has only recently become identified and explored in more empirical circumstances. Even though the literature has no consensus on what constitutes attention, it is generally defined as the condition of greater awareness of the present, without an approach of evaluation or judgement. The most common form of consciousness is meditation practices, which appear to have many beneficial psychological effects on students. Several studies have argued that both provisional and learned attention can be of substantial use in promoting romantic relations of great quality. Mindfulness is both the opportunity that in the present moment students are linked to the self, that you can modify and execute your thoughts to the present (Jaithalia, et al ,2020).

The existing research has shown attention to the overall well-being impact and has influenced stress and bad experiences through the current awareness .This reduces awareness of negative emotions and acts as a platform for the well-being of clinicians by acting as a mechanism for growth in psychological distress.

The term Optimism is defined as it is widely covers two closely interconnected concepts: first the desirability for hope; second, the propensity to believe that we live in the 'best possible world,' as coincided in his famous theodicy, Voltaire's Candide, by the German philosopher Gottfried Wilhelm Leibniz .Over the last few years there have been numerous research on how optimism works as a psychological phenomenon which leads to a variety of theoretical formulations of the same concept, which are understood to be "disposition," "behavioral style," "cognitive distinctiveness" or "shared assumption "(Duy,et al.,2019).

Schreier and Carver theorized in their studies the "disposition" to optimism, called "dispositional optimism," which considered it to be a feature of a balanced personality that impacts the way in which students deal with present, past and future situations in life. Optimistic people are positive about everyday events. High associations between optimism and physical/mental well-being were found in the research carried out on this perspective. Optimist subjects tend to be protective more often are more stress resistant and are reluctant to utilize more suitable coping skills.

It is defined as a physical, social and mind-finding positive state.' We concentrate on mental well-being for our purpose. Mental well-being does not really have a single universal definition, but includes:

- The sense to feel positive and be able to work personally or in relationships

- The capacity to cope with ups and downs of life such as meeting the challenges and exploiting them

- the sense of connection with our environment and community

- have control of our lives and freedom.

- A sense of purpose and feeling valued

Mental health does not always mean happiness, of course, and does not mean that you do not feel bad or painful emotions such as grief, loss or failure that is a normal part of life. However, regardless of age, attention can help you lead a mentally healthier life and improve your health.

In higher education, mental health is recognized as an important problem of public health internationally. Substantial efforts in the UK have focused on mental health, including domestic regulatory framework and targeted student funding by the Government's Students' Office. Despite a lack of data, these activities inform our mental wellbeing of students.

As a healthy state, in which everyone has his own potential, he or she can handle normal life stress, work productively and successfully, and contribute for him or her."

A veterinarian with optimal well-being would therefore be in good physical health and mentally flourishing; be productive and aware of his substantial contribution to the Community, having a sense of personal satisfaction and purpose in the work involved. Many veterinarians would identify with him and not only with his health but also with his health and his well-being.

Factors that influence mental well-being, such as social assistance; academic support; clarity of functions; academia; self-depreciation; financial security; physical health; sleep; career trust; supervision of relationships and conditions of life, were also identified.

Depression and Anxiety in current COVID-19

Recent developments include the concept of anxiety and psychological trouble among students because of thinking about fear of death in the current COVID-19 pandemic—as a structure that predicts generalized depression and anxiety across the population. Fortunately it is possible to manage this anxiety by using some techniques. Although the World Health Organization has proposed certain strategies such as a reduction of news and the excessive use of social networks, this research emerges that indicate the role of positive autonomy and cognitive behavioral treatment as effective methods to alter or attenuate anxiety (Hamm, et al., 2019).

Optimism and Mental Health

For understanding the vulnerability to mental disorders, and especially mood disorders, positive and negative expectations of the future are important. There is an inverse relationship of optimism and depression between optimism and suicide ideation, which have also been found in recent studies. Optimism therefore seems to play a major moderating role in combining the feelings of a loss of hope with suicidal thoughts. In this connection, Van der Velden et al.,2019). recently explored the relation between 'disposal optimism' and depression in natural disaster victims.

The results of these research show that pessimists have no hope for the future, and are more susceptible to depressing disorders and anxiety, with a consequent deterioration of their social operations and quality of life in comparison with optimists. The role of optimism in physical and mental health was also evaluated in depressive conditions e.g., acute coronary syndrome), in which an important inverse link was established between dispositional optimism and level of lifestyle satisfaction on the one hand, and depressive symptoms following the cardiovascular event on the other. In addition to the mediating effect of optimism and pessimism on depressive symptoms, the results have indicated that optimism

moderated the mediating effect of meaning in life on depressive symptoms in the face of coronavirus stress. This evidence supports that optimism is key to promote psychological health and could help to decrease the impacts of coronavirus stress on the psychological health and well-being of young adults. Therefore, optimism could be integrated with meaning–based strategies to improve psychological health not only during but also after coronavirus pandemic (Lin, et al.,2020).

Chapter 2

Literature Review

Mindfulness

Awareness is defined in the 2014 Oxford dictionary as "a mental state achieved through concentrating awareness on the present moment, calmly recognizing and accepting one's sentiments, thoughts and corporeal sensations." Paying attention is frequently referred to in particular practices that focus the attention of a person—meditation, yoga, breathing, a single-point focus on an object— and is characterized by intent and no judicial observation. Carefulness is often linked to Eastern spirituality, but purely secular applications of awareness in environments as diverse as the working environment, corrections and educational institutions have been explored more and more. For all students, formal education can be difficult and stressful. Education faces similar challenges for students at all levels – elementary, secondary and high schools, universities, universities and colleges, and graduate and professional education.

While schools can be a place of wonderful learning and growth can happen, and negative internal states like anxiety, isolation and depression can also occur, which not only decrease a the experience of learning, but may also lead to such conduct as violence and intimidation. Teachers must concentrate on academic results and classroom material but can also encourage new non-academic curricula in order to create a better environment for learning. Carefulness training can be useful to help students to be more successful students and connected educational community members.

Optimism

The tendency to expect good things in the future is optimism. The reviewed literature shows that optimism is a mental attitude which influences physical and mental health as well as the way people deal with daily social and working life. Optimists have a significantly better performance than pessimists in unbearable events and where important goals for life are affected through adaptive management of individual goals and development and through active coping tactics.

Optimistic people have a positive effect on everyday events. Positive correlations between optimism and physical/mental welfare were found in the research conducted on this aspect. Optimistic topics tend to be more protective, are more stress-resistant and are likely to apply better coping strategies. Positive and negative future expectations are important for understanding mental vulnerability, especially mood disorders. Optimism may have a significant impact on mental and physical wellbeing. The promotion of a sound lifestyle, adaptive and cognitive actions, with more flexibility, problem-solving capabilities and more efficient information processing.

Relationship between Mindfulness and Optimism

Set out your purpose. Take a minute to set your intent for the day, first in the morning. What are you planning to do? To be deliberate helps you focus and be aware of your time and energy.

You have no 'problems,' challenges, opportunities or lessons. You have no 'problems' Pessimists everywhere see problems; optimists see both opportunities or challenges and lessons to learn. We choose and have to be aware of our thoughts. Jack Canfield, known for his book Chicken Soup, gives us a wording: E + R = O: event + response = outcome. But

there's a split second in which we can choose how we can respond to a situation, and bear this in mind can greatly impact the outcome and your level of happiness.

There have been many more health benefits than previously believed to be laughed in recent research. The disease improves cardiovascular health and has exercise-like benefits, including the release of endorphins to relieve pain, decrease appetite and stress, and reduce ageing. The immune system also improves and is a sleep aid. Anyone can make a positive, optimistic choice, even if it takes effort at the outset. Cautiousness is an important tool to do this.

While a good-designed study by Shapíro et al. (1998) has shown significant and consistent results, its implications are restricted by several limitations. These results are difficult to generalize first from the specific populations of premedical and medical students who have willingly decided to participate in a stress reduction programme. Furthermore, despite having been controlled by a wait-list, the design of the study lacked an alternative treatment comparison group which does not show whether the findings are specific to the operation used or whether other stress management techniques could also prove effective in increasing compassion.

Furthermore, long-term monitoring was not included to assess any lasting effects of the intervention on future stress that would contribute to the determination of the continued usefulness of the programme. Although limited by his brief continuation, the missing comparative group and the specific population this study shows that cultivating conscience through a strong short-term procedure leads, in stressed pre-medical and medical students, to at least temporary growth in empathy and compassion. And as empathy is an important predictor of marital adaptation and a disincentive for divorce (Long & Andrews, 1990), attention-training can be one way of nurturing couples' abilities for perspective and thus increasing their relationship satisfaction.

Researchers are also increasingly aware that individual mental health facilitates stronger relationships, and less psychological distress has demonstrated both dispositional and conscientiousness-based interventions (Coffey & Hartman, 2008). Attention is related positively to several individual advantages, which can contribute to healthier relationships. These intrapersonal gains are shown by increased positive affectivity, an appreciation of yourself and life satisfaction and reduced negative affectivity, anxiety, anger-hostility, depressed signs, and reactivity to stress (Brown & Ryan, 2003).

Therefore, more thoughtful people can more positively see their romance in a variety of ways because they are less capable of experiencing a negative affectivity that predicts relation conflict and dissolution (Gottman & Levenson, 1992).

To date, somewhat unclear are the mechanisms which show the association between awareness and healthy relationships. A theory is that awareness can help to improve relationship satisfaction by cultivating emotional repertoires that are more related. Wachs and Cordova (2007) assumed that better emotional abilities can mediate the connection between awareness and matrimonial satisfaction. Specifically, those inclined to naturally live in a more conscious state of consciousness expected to be able to identify and communicate their emotions better, to be more empathetic and to regulate their anger expressions better (Millstein, et al.,2019).

For instance, Burpee and Langer (2005), While using online self-identifiers to evaluate these variables, 95 adult subjects investigated links between feature related attention, matrimonial satisfaction and perceived spousal similarities. They found a significant positive correlation between consciousness and marital satisfaction and a little link between perceived marriages and population variables and the pleasure of marrying. As a result, their studies show a strong connection between matrimonial happiness and disposition to the tested values,

which account for about 8% of overall relationship satisfaction. These results reveal that couples who focus on their relationships, who are mentally engaged and open to new experiences and who are more satisfied and happy in all respects.

Rationale of the study

The COVID-19 pandemic has brought stress, anxiety, panic and mental disorders to students worldwide. Recent COVID-19 evidence suggests that psychological stress and anxiety prevalence rates are significantly high among university students in Pakistan (more than 25 per cent). Several mental disorders, including fear and affective disturbance, can result in serious stress. Some psychological factors, however can reduce the adverse psychological health impacts of stress. Positive traits and psychological strengths were often applied with the advent of positive psychology in particular tackling the problems of psychology (Vizoso, et al., 2019).

In this respect, mental health disorders and well-being in crisis times can play a key role as well as psychological strengths such as mindfulness and optimism. The aiming at examining the purpose of optimism and mental health regarding the relationship between stress in the coronavirus and suffered through an outbreak among secondary students. In this study we will talk about how mental health, mindfulness and optimism about the future will affect university students (Viafora, et al.,2015). So current study focused to study the relationship between mindfulness, optimism and mental health in Pakistani university students.

Objectives of the study
- To find out how the students at Covid 19 have a relationship between Mindfulness, optimism and mental health.
- To find out about the role of mindfulness and optimism as a mental health predictor in COVID-19 university students.

Hypotheses of the study

    • There is likely a relationship between university students' awareness, optimism mindfulness and mental health.

    • In university students, mindfulness and optimism are a predictor of mental health.

Methodology

Research Design

      The current study used correlational research design to assess the relationship between Mindfulness, Optimism, and Mental health of University students during Covid-19.

Sample

      The sample was comprised of (N=224) university students both male (n=89) and female (n=135) from different universities of Lahore, Pakistan. Convenient sampling technique was used.

Inclusion Criteria

      This research was based in students between the age ranges of 18 to 25 of both gender, from different universities of Lahore, Pakistan.

Operational Definition of Variables

Mindfulness

It is defined as attentiveness of what is happening today and how it is conscious. It is an attribute which varies from one person to another. The focus and awareness of events and experiences vary. The capacity inherent in individuals differ because of their discipline, personality and self-regulation. (Brown & Ryan, 2003)..

Optimism

      Optimism is a mental approach linked to the belief in the desirable outcome of all of our actions. The way we believe, feel and act affects the psychological ability. There is global expectation that in future, we will get more good (desirable) than bad (unwanted) things. (Demirtaş, et al., 2020).

Mental Health

   In terms of absence of depression, anxiety and stress, mental health is defined. Depression is characterized by a low positive impact and anhedonia while anxiety has the unique characteristic of physiological hyperactivity. Symptoms like irritability and nerve tension include general distress (Feng, et al.,2020).

Assessment Measure

Four measures were used to collect data for mindfulness we use Mindfulness Attention Awareness Scale, for optimism we use Life Orientation Scale and for mental health it is DAAS scale.

Demographic Information Form

It include all the demographic information of the participants as age, gender, education, department, semester, and CGPA .

Mindfulness Attention Awareness Scale

The character of MAAS is a 15-point scale designed to measure an important trait of mindfulness, a receptive state of mind in which attention, illuminated by a keen awareness of what is happening in the present, simply discovers what is happening. This contrasts with a conceptual type of processing where events and experiences are filtered by cognitive judgments, assessments, memories, beliefs, and other forms of cognitive manipulation. In numerous studies since 2003, the MAAS trait has shown excellent psychometric properties. A single factor scale structure was confirmed by factorial analysis with students, communities, and adult cancer populations. The internal consistency levels are generally between 0.80 and 0.90. The MAAS showed a high test-retest reliability, discriminant and convergent validity, validity of the known group and validity of the criterion. Correlation, quasi-experimental and experimental studies have shown that the MAAS trait uses a single quality of consciousness that is related and predictive to various emotional regulations, behavior regulation, interpersonal phenomena and well-being. The measurement time does not exceed 5 minutes. A 5-point validation version of MAAS is also available from Brown and Ryan (2003) or upon request (Caballero, et al.,2019).

 Life Orientation Scale

A standard psychologic measurement tool for measuring optimism is the Life Orientation Test (LOT).This was created in 1985, and the improved version of the LOT, LOT-Revised or LOT-R has become more popular for individual and professional purposes. This test was first produced by Michael Scheier and Charles Carver in 1985.The first Life Orientation Test had 12 questions, each objectively type measuring optimism and pessimism. The participants had to reply to every item on a Likert Scale of 5, where – 0 means 'strongly disagree,' and 4 means 'strong agree.' The LOT uses questions that can be addressed to any

individual irrespective of background or age and examines simple life elements that we are all witnessing at some stage in life (Jovančević, et al.,2020).

DASS Scale

The DASS is a group of three scales for self-reporting, designed to measure negative depression, anxiety and stress conditions. The DASS has not been constructed simply as another set of scales to measure emotional statements that have traditionally been defined but to further define, understand, and measure the omnipresent and clinically important emotional states usually called depression, anxiety and stress. The DASS should therefore meet both researchers' and science-based clinicians' requirements (Gillanders, et al.,2019).

Each of the three DASS scales has 14 items, divided by 2-5 items of similar content into subscales. The depression scale assesses dysphoria, despair, life depreciation, self-interest, anhedonia and inertia. The scale of Anxiety evaluates the autonomous excitement, muscular effects of the skeleton, the situation anxiety and subjective anxiety experience. The stress scale is susceptible to chronic non-specific excitement. It measures the relaxing difficulty, the excitement of the nerves, and the irritation/stringiness of them. Those involved must use the 4-point to rate the extent of each state during the past week. Depression, anxiety and stress values are calculated by summing the values for the items concerned

A short version, the DASS21, is available with 7 items per scale, in addition to the 42-point fundamental questionnaire. Note that a previous version of the DASS Scale was called the questionnaire on self-analysis (SAQ). As the DASS scales have been demonstrated to have a high level of internal coherence and to produce meaningful differences in different settings, these scales should meet the needs of the researchers and the clinicians who would like over time to measure current or changes of state in depression, anxiety and stress in three dimensions.

Procedure

The research proposal was submitted to ethical committee for approval. Departmental approval was obtained for the study. After obtaining departmental approval permission, participants were approached online (google form), and inform consent was obtained. Participants were assured regarding the confidentiality of their information. They were informed about their rights to withdraw any time during the research. Purpose of the study was explained to them. All the participants then fill the questionnaire willingly.

A booklet containing all the scales was determined to them. Instructions were also written in the scales as to how to respond to the items in the relevant scale along with proper labelling of rating scales. It took 15 minutes to complete the questionnaires. Participants were thanked at the end of data collection and any question regarding the use of their personal information was answered. After the completion of the data collection, the data was preceded for SPSS analysis by using SPSS version 20.

Ethical Considerations

All ethical were followed for conducting the research. No physical or psychological harm was caused to the participants. The permission letter was signed from the authors of scales. Confidentiality was maintained, informed consent was taken, and participants were debriefed about the purpose and nature of the research and were given the right of withdrawal from participation. The study synopsis was approved by the Ethical Review Committee of the Department of Humanities, Comsats University Islamabad, and Lahore Campus.

Statistical Analysis

In the present study, descriptive statistical analysis including mean, standard deviation, frequencies and percentages of participant's demographical characteristics were calculated. Study's inferential statistical analysis included Pearson Product Movement Correlation analysis and Regression Analysis.

Chapter 4

Results

The result is based on the relationship of mindfulness, optimism, mental health in university students during COVID-19. It was hypothesized that there is a relationship between mindfulness, optimism and mental health in university students. Moreover, mindfulness and optimism act as predictor of mental health in university students.

Descriptive analysis was used to measure the reliabilities, means and standard deviation of studied variables. Pearson Product-Moment Correlation was used to find out the relationship of mindfulness, optimism and mental health. For prediction of mental health by mindfulness and optimism in students, hierarchical regression analysis was used.

Table 1

Descriptive Statistical of Studied Variables (N=224).

Variable	k	Actual Range	Potential Range	M(SD)	A
Mindfulness	15	16-90	15-20	54.5(14.05)	.84
Optimism	10	1-21	0-24		.79
Mental Health	21				
Stress	7	0-21	0-21	8.54(4.62)	.76
Depression	7	0-21	0-21	7.83(4.98)	.80
Anxiety	7	0-21	0-21	8.62(4.64)	.74
LO				13.5(3.10)	

Note= k= Number of Statements, M=Mean, SD=Standard Deviation: α= Reliability

Descriptive Statistics of studied variables were calculated and reported in Table 1. There are three scales that are used in present study. The 15-item Mindfulness questionnaire (MAAS), Optimism Life orientation scale and Mental Health continuum short form (DAAS).The above table demonstrates that on the sample of students (N=224), the reliability of all studies variables are above average. The reliability of Mental Health is more in comparison to other variables. In addition to mean, standard deviation, internal consistency, and the mean score of the study variables were also calculated.

Table 2

Descriptive Statistics of Demographic Variables (N=224).

Demographic Variable	f(%)	M(SD)
Age		20.02(2.004)
Gender	224(100.0)	
Family System	224(100.0)	
Job	224(100.0)	
Family Income		122720.98(383613.150)
Have you experienced COVID-19	224(100.0)	
Does any of your family member experienced COVID-19	224(100.0)	

Descriptive characteristics of participants were estimated by mean, standard deviations, frequencies and percentages. One forty students were approached from which only 2(1%) were at intermediate level of education, 27(19%) at matric level, 30(22%) at middle level, 41(29%) at primary level, and 41(29%) reported no formal no education. The age range of participants was from 11 years to 18 years (*M=20.2, SD=2.004*).Gender of participants are only 224(100%) were convicts. Family system reported *(F=224, SD=100)*.Jobs reported *(F=224, SD=100).*Only Family income convicts *(M=122720.98,*

SD=383613.150). Participants experienced COVID-19 *(F=224, SD=100).* Does any of your family member experienced COVID-19 reported *(F=224, SD=100).*

Table 3

Bivariate Correlation between Studied Variables (N=224).

Measure	1M	2s	3D	4a	5lo
Mindfulness	-	-.23**	-.34***	-.30***	.20**
Stress		-	.73***	.78***	-.20**
Depression			-	.72***	-.30**
Anxiety				-	-.14*
LO					-

*Note. ***p<.001, **p<.01, *p<.05*

　　　　Pearson Product Moment Correlation was used to assess the relationship between mindfulness, optimism, and mental health. According to the findings, mindfulness and life orientation shows negative correlation with mental health domains i.e. stress, depression, and anxiety. It means that students having high level of mindfulness and optimism show less stress, depression, and anxiety.

Table 4

Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Stress (N=224).

Predictors	*B*	*SE*	*β*	*Model Fit*	R^2	*ΔR²*
Step 1				F(1,222)=11.89**	.05	.05
Mindfulness	-.07	.02	-.23**			
Step 2				F(2,221)=9.12***		
Mindfulness	-.06	.02	-.19**			
LO	-.24	.09	-.16*		.08	.03

*Note. ***p<.001, **p<.01, *p<.05*

Hierarchical regression was used to see the prediction effect of mindfulness and optimism on mental health domain i.e. stress. It is seen from the results that mindfulness and optimism acts as significant negative predictor of stress, showing increase in mindfulness and optimism leads to decrease level of stress in university students.

Table 5

Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Anxiety (N=224).

Predictors	*B*	*SE*	*β*	*Model Fit*	R^2	ΔR^2
Step 1				F(1,222)=21.15***	.09	.09
Mindfulness	-.10	.02	-.34***			
Step 2				F(2,221)=11.34***		
Mindfulness	-.10	.02	-.29***			
LO	-.38	.10	-.29***		.09	.01

*Note. ***p<.001, **p<.01, *p<.05*

Hierarchical regression was used to see the prediction effect of mindfulness and optimism on mental health domain i.e. anxiety. It is seen from the results that mindfulness acts as significant negative predictor of anxiety, showing increase in mindfulness leads to decrease level of anxiety in university students. Moreover, optimism doesn't predict anxiety in university students.

Table 6

Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Depression (N=224).

Predictors	*B*	*SE*	*β*	*Model Fit*	R^2	*ΔR²*
Step 1				F(1,222)=28.88***	.12	.12
Mindfulness	-.12	.02	-.23**			
Step 2				F(2,221)=22.54***		
Mindfulness	-.06	.02	-.19**			
LO	-.24	.09	-.16*		.17	.05

*Note. ***p<.001, **p<.01, *p<.05*

Hierarchical regression was used to see the prediction effect of mindfulness and optimism on mental health domain i.e. depression. It is seen from the results that mindfulness and optimism acts as significant negative predictor of depression, showing increase in mindfulness and optimism leads to decrease level of depression in university students.

Summary of the Findings

- There is negative relationship between mindfulness and mental health (stress, anxiety, and depression) in university students.
- There is negative relationship between optimism and mental health (stress, anxiety, and depression) in university students.
- Mindfulness negatively predicts stress, anxiety, and depression in university students.
- Optimism negatively predicts stress and depression in university students.

Chapter 5

Discussion

The aim of the thesis is to understand the relationship between mindfulness , optimism and mental health in university students .According to the research Mindfulness, Optimism and Mental health in university students during COVID are all related . Because of COVID students cannot concentrate on studies which lead them depression , anxiety. We use different scales such as Mindfulness Attention awareness Scale , Optimism Life Orientation Scale and Mental Health DAAS Scale. The data we have collected is from online google form due to universities are close. The result of the finding shows that there is a relationship between mindfulness, Optimism and mental health . Moreover, mindfulness and optimism act as predictor of mental health in university students. We have descriptive analysis for variables and its results show that the reliability of Mental Health is more in comparison to other variables. Table 2 explain Descriptive Statistics of Demographic Variables which include age , gender , family status , etc .According to this participants were estimated by mean, standard deviations, frequencies and percentages. Table 3 discuss Bivariate Correlation between Studied Variables .In order to evaluate the relationship of mindfulness, optimism, and mental health, the Pearson Product Moment Correlation was used. Awareness and life orientation show negative correlations with mental health domains, i.e. stress, depression, and anxiety, according to the findings. In Table 4 Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Stress we see that the predictive effect of mindfulness and optimism on mental health, i.e. stress, hierarchical regression was used. The results show that mindfulness and optimism act as a significant negative predictor of stress, showing an increase in awareness and optimism in university students leads to a decrease in the level of stress.

Table 5 suggests the Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Anxiety with (N=224) and in Table 6 we studies Hierarchical Regression showing Prediction Effect of Mindfulness and Optimism on Depression. The finding shows that University students have a negative relationship between mindfulness and mental health (stress, anxiety and depression). There is a negative relationship among university students between optimism and mental health (stress, anxiety, and depression).

Mindfulness in university students negatively predicts stress, anxiety and depression. Optimism in university students negatively predicts stress and depression. So this information allows further investigating some variables such as Mindfulness and Optimism and mental health problems university students are facing during COVID. It is an important aspect to

look at the other variables also like depression and anxiety, because this is also in relation to students behavior. However, in this way this research puts light at bringing the future trend to research the areas which are not much studied yet. Present area of research also emphasized over the fact that humans' health not only needs medical examinations but psychological examinations. So in future psychological assessment can contain some other assessments other than other then mindfulness and optimism with depressive symptoms and empathy like types of mental disorders in students All the way this study meaningfully as itliad out a wide range of future direction in this area of investigation these trends can be followed by carrying current study in work for future researches. These trends can be followed by carrying current study in work for future researches.

Suggesting and limitation

- As universities are closed around the world and so in Pakistan . In current scenario the data has been collected from online google form. Due to this the sample is small because students is not easily accessible because of COVID-19. In future research people can select impact of optimism , mental health and mindfulness in university students all over the Pakistan for improvement of research.

- During the data collection from university students there were many other mental health problems which were observed e.g. aggression, suicidal ideation, mood disorder due to COVID. Further researchers may incorporate some new psychological and mental health factors on the basis of current variables results.

- Like other than mindfulness and Optimistic behavior and mental health problems addressing other constructs such as mental health outcomes, aggression, anxiety, and suicidal ideations. In the current research these variables was not the part of the research. In future people can use intervention base studies by using these studies people can observe students behavior in detail and they provide counseling services to students. In the current limited observation was observed.

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Conclusion

      This research study was aimed to understand the mindfulness , Optimism and mental health problem of university students in the Pakistani context during COVID. The study found that optimism and mindfulness has an effect on mental health's depressive component. Although the overall mental wellbeing has no major effects, being positive decreases the depression and increase life quality that increases mental health indirectly

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Appendices	Title
Appendix A	Permission Letters from Concerned Departments
Appendix B	Permission Letters from Scales' Authors
Appendix C	Consent Form
Appendix D	Demographic Performa Sheet
Appendix E	Scales

Demographic sheet

Age

Gender

Marital status

Department

Education

Religion

Family system

Job status

Family income

Number of siblings

Statements	almost always 1	very frequently 2	somewhat frequently 3	somewhat infrequently 4	very infrequently 5	almost never 6
I could be experiencing some emotion and not be conscious of it until sometime later.						
I break or spill things because of carelessness, not paying attention, or thinking of something else.						
I find it difficult to stay focused on what's happening in the present.						
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.						
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.						
I forget a person's name almost as soon as I've been told it for the first time.						
It seems I am "running on automatic," without much awareness of what I'm doing.						
I rush through activities without being really attentive to them.						
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.						
I do jobs or tasks automatically, without being aware of what I'm doing.						
I find myself listening to someone with one ear,						

doing something else at the same time.					
I drive places on 'automatic pilot' and then wonder why I went there.					
I find myself preoccupied with the future or the past.					
I find myself doing things without paying attention.					
I snack without being aware that I'm eating.					

Statements	Strongly disagree 0	Disagree 1	Neutral 2	Agree 3	Strongly agree 4
In uncertain times, I usually expect the best.					
If something can go wrong for me, it will. R					
I'm always optimistic about my future.					
I hardly ever expect things to go my way. R					
I rarely count on good things happening to me. R					
Overall, I expect more good things to happen to me than bad.					

	Did not apply to me at all 0	Applied to me to some degree, or some of the time 1	Applied to me to a considerable degree or a good part of time 2	Applied to me very much or most of the time 3
I found it hard to wind down				
I was aware of dryness of my mouth				

I couldn't seem to experience any positive feeling at all				
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)				
I found it difficult to work up the initiative to do things				
I tended to over-react to situations				
I experienced trembling (e.g. in the hands)				
I felt that I was using a lot of nervous energy				
I was worried about situations in which I might panic and make a fool of myself				
I felt that I had nothing to look forward to				
I found myself getting agitated				
I found it difficult to relax				
I felt down-hearted and blue				
I was intolerant of anything that kept me from getting on with what I was doing				
I felt I was close to panic				
I was unable to become enthusiastic about anything				

I felt I wasn't worth much as a person				
I felt that I was rather touchy				
I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)				
I felt scared without any good reason				
I felt that life was meaningless				