Psychological Distress, Emotional Intelligence, and Sleep Quality among University Students

Mahnoor Hassan*1 Burhan Ul Haq1, and Aiman Farooq1

Abstract

*Corresponding Author:
Mahnoor Hassan
Department of Applied
Psychology,
Government College University
Faisalabad. Pakistan.

Correspondence Email: mahnoorhassan2029@gmail.com

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The study was conducted to explore the relationship psychological distress, between emotional intelligence, and sleep quality among university students. The correlational research method was used to conduct the research and the sample was taken (N=400) which was equally disseminated between (n=200) male and (n=200) female university students aged between 18-30 years having qualifications of BS, MSc, and MS were selected. The sample size was selected through a sample size calculator (Qualtrics, 2019). It was taken from different government and private universities of Faisalabad through a purposive sampling technique. The data were collected by using a Kessler psychological distress scale Urdu version (Ghafoor et al., 2010), an emotional intelligence scale in Urdu (Hashmi et al., 2015), and the Pittsburgh sleep quality index (Shahid et al., 2014). The statistical analysis was done using SPSS version 26. The results found a significant negative (p<0.01) correlation of psychological distress with emotional intelligence (r=-.67, p<0.01) and sleep quality (r=-.89, p<0.01). However, the relationship between emotional intelligence and sleep quality was found to be significantly positive (r=.66, p<0.01). The research would help in understanding the association between psychological distress, emotional intelligence, and sleep quality among university students to academic avoid issues and to enhance academic performance.

Keywords: psychological distress, emotional intelligence, sleep quality, university students.

Introduction and Literature Review

The mental health comprises of numerous mechanisms i.e. the way a person feels and represses his thoughts and emotions has a direct impact not only upon physical health but also on mental health. Moreover, the surroundings, the environment, social interactions, and relationships have a deep effect on a person's mental health. When mental health problems arise, it causes psychological distress or emotional distress (Llor-Esteban et al., 2017). Along with the pervasive physical health complications, many university students struggling with academic problems also sufferred from the added negative impacts to their mental health. Among them, most of the people do not pay attention over these issues for them physical

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¹ Department of Applied Psychology, Government College University Faisalabad, Pakistan.

health is more important than their mental health (Boas & Morin, 2014). Otherhand, the thoughts also plays a vital role in causing psychological distress among individuals as a small inconvenience results in the generation of cognitive errors. These cognitive errors in turn generate a loop of negative thinking which increases the psychological distress of that person. In that situation, an individual is unable to think positively and could not manage emotions according to the situation, no matter how much the person tries to avoid those negative thoughts but the loop of cognitive errors constantly generates negative thoughts that enhance psychological distress (Oecd, 2020).

The emotional intelligence of an individual plays a vital role in the management of psychological distress as a minor dispute or stressor could distress a person whereas sometimes a severe loss or argument could not affect, as it all depends on the capability of that individual that how he manages that distress (Kumar, 2016). Emotional intelligence is the ability of an individual to manage his emotions according to the situations and circumstances. So, if an individual has high emotional intelligence could have the capability to manage the psychological distress i.e. depression, stress, anxiety, or any situational issue easily (Krasnova et al., 2013).

Bernardon et al. (2011) reported that there have been various causes of psychological distress in the life of a university student i.e. the competition in studies or for securing seats in university, getting a good job, for getting a good post, etc. The reason behind this could be the pressure of studies and careers due to which they always feel distressed. The grading system has also played, an important role in enhancing this psychological distress among individuals as they always try to achieve something high in their life (Açmaz et al., 2013). No matter what stage of life it is, the university students faced the competition everywhere due to which they felt distressed and owing to these issues may suffer from constant depression or anxiety which enhances dissatisfaction with life. If the person lacks emotional intelligence then it gets hard for him to manage these problems of life (Elkington et al., 2010).

Moreover, the high standards that are set by the students enhance the psychological distress among them. Until or unless the individual achieve his aim he feels like a loser which in turn make them emotionally disturbed (Perveen et al., 2018). For a successful career the emotional intelligence is important for students as their progress in any field of life depends on the way they manage their stress and emotions for which they require high emotional intelligence. There have been different branches of adopting an emotional intelligence which may include lower level of thinking like simple tasks or the higher level of thinking like abstract thinking (Cardozo et al., 2012).

Thus, the psychological distress and emotional disturbance can impact the sleep quality of an individual. Baturay and Toker (2019) observed that stress could lead to insomnia or hypersomnia. Moreover, sleep disturbance (insomnia/hypersomnia) has been among the main symptoms of depressive disorders. So, a disturbance in a student's life could disturb his sleep quality a lot. This psychological distress could be due to various reasons i.e. GPA pressure, exams tension, a minor conflict or the stress of competition which could lead to overthinking at night (Hamer et al., 2010).

Agerup et al. (2015) in a study observed that some university students reported that they sleep a lot when they get depressed while some reported that they could not sleep well when they felt anxious or depressed. So, there are various ways through which the psychological distress could impact the life of a university student and if he lacks emotional intelligence then he would suffer from sleep issues comparatively more than the student who has high emotional intelligence because he does not have the ability to manage his emotions according to the situation. Thus impacting his life, and quality of sleep just because of lack of emotional intelligence (Bronstein & Montgomery, 2011).

Perveen et al. (2018) explored the relationship among emotional intelligence, sleep quality and mental health of university students. It was assumed that emotional intelligence was a better predictor of psychological well-being. The purposive convenient sample included 209 students (89 men and 120 women) from GC University, Lahore, Pakistan. Results indicated significant positive relationship among emotional intelligence, sleep quality, and psychological well-being while emotional intelligence had significant negative association with psychological distress. Moreover, multiple regression showed that emotional intelligence and mental health had significant effect on sleep quality of the students. Furthermore, as study by Beranuy et al. (2009) found that emotional intelligence was a better predictor of sleep quality than psychological distress

Another study conducted by Che Rahimi et al. (2021) explored the mediating roles of psychological distress and sleep disturbance on the university students during covid-19. For this purpose, 1521 students from universities in Vietnam was assessed utilizing the online-based cross-sectional survey. The study revealed that fear and anxiety of covid-19 was strongly related to psychological distress and sleep disturbance and life satisfaction among Vietnamese university students. Also, life satisfaction was found to have a strong and negative association with psychological distress, but without sleep disturbance. Moreover, the findings of the study by Barker et al. (2011) revealed that fear and anxiety of covid-19 reduced life satisfaction and increased sleep disturbance via psychological distress.

Furthermore, Insomnia had significant positive relationship with psychological distress and maladaptive coping, and significant negative relationship with adaptive coping (Cheung & Wong, 2011). Additionally, study by Perveen et al. (2018) further showed that emotional intelligence had significant positive relationship with adaptive coping but had significant negative relationship with maladaptive coping. Multiple regression analysis showed that insomnia and psychological distress were significant predictors of coping (adaptive and maladaptive).

Rationale of Study

The university students have been facing a lot of issues in their lives due to which they get mentally and physically disturbed (Cetinkaya-Yildiz et al., 2011). The physical and psychological health of an individual have been found interlinked with each other i.e. the disturbance in mental health could affect the physical health and vice versa. Moreover, if the individual has high emotional intelligence then he could manage his emotions and feelings for the management of his mental health which could improve his sleep quality as well (Rahiem et al., 2021). So, the current study was aimed to explore the relationship between psychological distress (depression, anxiety, stress etc.) emotional intelligence and the sleep quality among university students.

Objectives of the Study

- 1. To identify the relationship between psychological distress, emotional intelligence, and sleep quality among university students.
- 2. To find out the impact of psychological distress and emotional intelligence on the sleep quality of university students.
- 3. To find out a significant gender difference in psychological distress, emotional intelligence, and sleep quality among university students.

Hypotheses of the study

1. There would be a significant relationship between psychological distress, emotional intelligence, and sleep quality among university students.

- 2. There would be a significant impact of psychological distress and emotional intelligence on the sleep quality of university students.
- 3. There would be a significant gender difference in psychological distress, emotional intelligence, and sleep quality among university students.

Conceptual Model of the Study

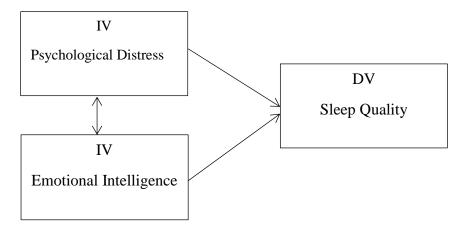


Figure 1: Conceptual Framework of Hypotheses

Method

Research design

Correlation research design was used in the current research to identify the relationship between psychological distress, emotional intelligence, and sleep quality among university students.

Sampling Technique

In the present study, a purposive sampling technique was used because the required sample was taken to find out the relationship between psychological distress, emotional intelligence and sleep quality among university students only. So, the sample was taken from the universities of Faisalabad.

Participants of Study

The sample consisted of 400 University students that were taken from GCUF, Riphah International University, Faisalabad Campus, and GCWUF through purposive sampling technique. The age range was 18 to 30 years which was selected according to Erik Erikson's psychosocial stages (Erikson, 1994).

Instruments

Following instruments were utilized for this research

- i) Kessler Psychological Distress Scale Urdu Version (Ghafoor et al., 2010).
- ii) Emotional intelligence scale in Urdu (Hashmi et al., 2015)
- iii) The Pittsburgh Sleep Quality Index Urdu Version (Shahid et al., 2014).

Kessler Psychological Distress Scale (Urdu Version) (Ghafoor et al., 2016): Ghafoor et al. (2010) Kessler psychological distress scale in Urdu version consists of 10 items and it is a 5-point Likert scale. Its Cronbach alpha value is (Cronbach's $\alpha = .88$).

Emotional Intelligence Scale in Urdu (Batool & Khalid, 2011): Emotional intelligence scale in Urdu version is a 4 point Likert type scale having 56 items. Its Cronbach alpha value is (Cronbach's $\alpha = .95$).

The Pittsburgh Sleep Quality Index (Hashmi et al., 2014): The Pittsburgh Sleep Quality Index Urdu Version (Hashmi et al., 2014) has 19 questions and its Cronbach alpha value is 0.56.

Statistical Analysis

The collected data will be analyzed through SPSS (26.0). To check the relationship among all variables bivariate correlation analysis was used. While, multiple regression analysis was used to assess the effect of independent variable on dependent variable. However, for checking the comparison between two groups of demographic variables independent sample t-test was used for hypotheses testing.

Ethical Consideration

To make all the strategies moral, the researchers accentuate and completely followed all the moral contemplations i.e. debriefing the research purpose, assurance of confidentiality and taking care of the security of the participants, during the entire research. Accordingly, before directing the examination, authorization was looked for from the creator of the Kessler mental misery scale to utilize the scales. The assent was taken from the participants after clarifying the idea of the study before the organization of the poll. The participants reserved the option to pull back or end from investment whenever. The participants were guaranteed that the data accumulated from them will be kept classified and won't be utilized for some other reason other than this research work.

Results
Table 1
Inter-Correlation between Psychological Distress, Emotional Intelligence, and Sleep Quality among University Students

	1	2	3	M(SD)
PD	-			35.97 (17.5)
EI	674**	-		35.95(17.1)
SQ	829**	.663**	-	12.23 (3.9)

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Note: PD=Psychological Distress, EI= Emotional Intelligence, SQ=Sleep Quality, M=Mean, SD= Standard Deviation

The table showed a significant negative (p<0.01) correlation of psychological distress with emotional intelligence (r=-.67, p<0.01) and sleep quality (r=-.89, p<0.01). However, the relationship between emotional intelligence and sleep quality was found to be significantly positive (r=.63, p<0.01).

Table 2 *Multiple Regression Analysis of Psychological Distress as Predictor of Sleep Quality and Emotional Intelligence among University Students (N=400)*

		Unstandardized Coefficients		Standardized Coefficients	-		
Mod	lel	В	SE	Beta	ΔR	t	Sig.
1	(Constant)	2.22	3.3			.66	.000
	Psychological Distress	3.12	.25	.70	.76 12.0		.000

2	(Constant)	5.55	1.8			2.9	.000
	Psychological Distress	.84	.04	.83	.68		.000
	Emotional Intelligence				18.1		

a. Dependent Variable: Sleep Quality

The table showed the results of stepwise multiple regression analysis and found that psychological distress (β = .70, p<.001) and emotional intelligence (β = .84, p<.001) have an impact on sleep quality among university students.

Table 3Descriptive Statistics and t-test statistics for Psychological Distress, Emotional Intelligence, and Sleep Quality among University Students-Gender wise difference (N=400)

Scales	Gender	M(SD)	t	Cohen's d	sig
Psychological Distress	Male	39.57(13.79)	2.2	2.8	.001
	Female	44.47(12.14)			
Emotional Intelligence	Male	40.87(12.14)	2.4	2.7	.001
	Female	37.65(13.62)			
Sleep Quality	Male	12.22(5.12)	.82	.64	.001
	Female	14.22(3.13)			

The table showed the gender differences in the scores among psychological distress, emotional intelligence and sleep quality among university students and depicted that emotional intelligence was more in males as compared to female university students whereas the psychological distress and sleep quality disturbance were comparatively more prevalent among female university students.

Discussion

Through the correlation analysis it was observed that emotional intelligence and sleep quality were both significantly positively related to each other, whereas psychological distress was significantly negatively correlated to both of them which supported the first hypothesis of the study that there would be a significant relationship between psychological distress, emotional intelligence, and sleep quality among university students. The results of this hypothesis were supported by a research conducted by Atkins at al. (2013) who explored in his research that the individuals who become distressed do not enjoy the good life as they suffer different problems throughout their life due to that psychological distress. This psychological distress if not treated in time, can become more disastrous as it can shape into a clinically diagnosed disorder and can cause sleep disturbances as well.

Furthermore, Wright et al. (2009) in a study found that lack of emotional intelligence can cause psychological distress among the individuals in their adulthood which explains that

a low level of emotional intelligence can enhance psychological distress and sleep disturbances within an individual.

The results of second hypothesis found a significant impact of both i.e. psychological distress and emotional intelligence on the sleep quality of university students which proved the purposed hypothesis i.e. there would be a significant effect of psychological distress and emotional intelligence on the sleep quality of university students. A study conducted by Rabadi et al. (2017) found a significant impact of psychological distress on the sleep of students as the students who were suffering from depression, stress or anxiety reported that they were suffering from insomnia as well.

Additionally, psychological distress impacts a person's life in various ways as the clash between life's expectations and reality give rise to psychological distress so it has been observed that those individuals who are not satisfied with their lives suffer from psychological distress. The relationship of psychological distress and emotional intelligence can be of both directions, it could be possible that due to lack of emotional intelligence a person may not enjoy his life as he wishes and his distress also causes sleep disturbances as well (Kumar, 2016).

The result of third hypothesis found a significant gender difference in psychological distress, emotional intelligence and sleep quality among university students. It was observed that emotional intelligence was more in males as compared to female university students whereas the psychological distress and sleep quality disturbance were comparatively more prevalent among female university students. Rasmussen et al. (2013) in his study found that the sleep quality of female university students was more affected due to psychological distress than male university students. Moreover, a study by Schnettler et al. (2017) revealed that male university students had high emotional intelligence which forbade them from becoming distressed in life at any situation or event.

Conclusion

The results of the study concluded that psychological distress, emotional intelligence, and sleep quality were correlated with each other among university students. The psychological distress was found to be negatively correlated with both emotional intelligence and sleep quality whereas the emotional intelligence and sleep quality were found to be significantly positively correlated with each other. In addition to this, the results found that psychological distress and emotional intelligence can affect the sleep quality of university students. There was a gender difference found in sleep quality as female students were less satisfied by their sleep quality due to high level of psychological distress as compared to male university students whereas male students were found to be more emotionally intelligent than female university students.

Limitations and Suggestions

For future research university students from other cities should be included. A comparative study should be conducted on the psychological distress, emotional intelligence, and sleep quality of both married and unmarried university students. PhD students should also be included in future researches.

Implications of the Study

The study will help in spreading awareness regarding the impact on sleep quality of university students due to the psychological distress that they face during their studies. This psychological distress can be depression, anxiety or any other situational emotional issue for the management of which they need emotional intelligence. So, the study will throw light on the importance of teaching emotional intelligence to the university students for the management of their psychological distress and sleep quality.

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