Unraveling the Nexus: Dysfunctional Family Dynamics, Mental Health Struggles, and Coping Strategies among University Students

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Abstract

Background: Family dysfunction can significantly impact the mental health of university students. Effective coping mechanisms play a crucial role in mitigating the negative impact of family dysfunction on students' mental well-being. Aim: to investigate the relationship between dysfunctional family dynamics, mental health issues, and coping strategies among Najran University students in Saudi Arabia. **Methods**: Cross-sectional study. Data collection methods: the researchers utilized a structured questionnaire comprising five parts: socio-demographic information, family functioning, mental health assessment, and coping strategies. A convenience sample was used to include 386 students. **Results:** the current study revealed that more than half of the studied families were functional. Regarding mental health risk, more than one-quarter were at high risk for mental health problems. In terms of coping mechanisms, more than one-third were unsatisfactory. Further analysis demonstrated a strong negative correlation between family functioning and the likelihood of mental health problems. Additionally, there was a moderate negative correlation between the use of coping mechanisms and the likelihood of mental health outcomes among university students. Dysfunctional family environments were associated with increased risks of mental health problems. Conversely, effective coping strategies were linked to lower mental health risks. Recommendations: Educational programs aimed at enhancing coping skills and resilience among students should also be prioritized.

Keywords: Coping Strategies, Dysfunctional Family Dynamics, Mental Health Struggles, University Students

Introduction:

Family dynamics are pivotal in shaping individuals' psychological well-being, especially during critical developmental stages such as young adulthood. The intricate interplay between family members can significantly impact one's mental health, influencing coping strategies and resilience. Understanding these dynamics is crucial for addressing mental health challenges, particularly among university students who navigate a complex transition period (World Health Organization, 2021)

"Dysfunctional family dynamics" encompasses various communication patterns, conflict resolution, and emotional expression within a family unit. These dynamics can contribute to stress, anxiety, and depression among university students, affecting their academic performance and overall quality of life. Exploring the nexus between dysfunctional family dynamics and mental health struggles sheds light on underlying factors influencing students' wellbeing (Behere, Basnet, and Campbell, 2017& Kganyago Mphaphuli, 2023). Mental health problems among university students have garnered increasing attention due to their prevalence and impact on academic success. Factors such as academic pressure, social isolation, and financial stress can exacerbate existing mental health conditions or contribute to the development of new ones. Recognizing the complex interplay between familial influences and individual resilience is essential for promoting holistic well-being (Wang, Tian, Guo, & Huebner, 2020)

Coping strategies serve as adaptive mechanisms individuals employ to navigate challenges and mitigate stressors. While some coping strategies are healthy and effective, others may be maladaptive and contribute to worsening mental health outcomes. Understanding the coping mechanisms utilized by university students within the context of dysfunctional family dynamics provides insights into intervention strategies and support systems (Ejaikait, 2014& Shi et al., 2023).

The transition from adolescence to adulthood is a critical period marked by significant changes in

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responsibilities, relationships, and identity formation. This transition often coincides with increased autonomy and independence alongside ongoing familial influences for university students. Exploring how these dynamics intersect with mental health challenges offers a comprehensive view of the factors impacting students' well-being (Wood et al., 2018)

Research on dysfunctional family dynamics and mental health often emphasizes the role of communication patterns, parental support, and attachment styles. These factors can shape students' perceptions of themselves, their relationships, and their ability to cope with stressors. Investigating coping strategies within this context provides valuable insights into the resilience-building process among university students. The stigma surrounding mental health issues can further complicate the experiences of university students, deterring them from seeking help or disclosing their struggles (Stephen & Udisi, 2016)

This study aimed to explore the association between dysfunctional family dynamics, mental health struggles, and coping strategies among university students.

Research objectives

- 1. To assess the impact of dysfunctional family dynamics on the mental well-being of university students.
- 2. To examine the coping strategies employed by university students in response to dysfunctional family dynamics and mental health challenges.

Subject and method

Research design

A cross-sectional study was adopted to carry out this study.

Study setting

The study was conducted in Najran University, Najran city, Saudi Arabia

Sample size =386

The sample size was estimated according to the following formula:

Sample size =
$$(Z^2) x$$

 m^2

Z is the Z value (1.96 for a 95% confidence level)

(p) x (1-p)

- \blacktriangleright p is the proportion (50% in this case)
- \blacktriangleright m is the margin of error (0.05)

Data collection tools

The Structured Questionnaire designed to collect data composed of 5 parts

Part 1: Personal characteristics of the studied sample, such as age, gender, and residence.

Part 2: Family Functioning Questionnaire

It was developed by the researchers after reviewing the following study (Roncone et al., 2008). It is composed of 9 items, and it is a 5-point Likert scale (0 = "rarely" to 4 = "always"). The total score (range 0-36) can be obtained by summing the scores for each of the nine items. It was classified as a functional family if the score was more than

60% (21 points) and dysfunctional if the score was less than 60%.

Part 3: Mental health questionnaire

The General Health Questionnaire (GHQ) is a widely used self-administered screening tool designed to detect current state mental disturbances and disorders, especially in primary care settings. It was developed to provide a quick and reliable assessment of an individual's mental health status. Each item on the questionnaire is rated on a scale of 0 to 3, with the following response options: 0= Not at all, 1=No more than usual, 2 Rather more than usual, 3= Much more than usual. After completing the questionnaire, the scores from all items are typically summed to obtain a total score for each participant. Higher total scores on the GHO using the Likert scoring method indicate a higher likelihood of mental health problems or distress. It was adopted from (Anjara et al., 2020). The total score is free if it ranges from 0-12, moderate from 13-24, and higher risk to mental health problems if it is over 24.

Part 4: Coping Strategies Questionnaire

The researchers developed it based on the following studies (Kato, 2015 & Deasy et al., 2014). It included six strategies: problem-solving, emotional regulation, seeking social support, positive reframing, time management, and distraction. It is a 3-point Likert scale (0=rarely to 2= usually), and the total score is 12. The satisfactory level of coping is when the score ranges from 9-12, the average level is from 5-8, and the unsatisfactory level is when the score ranges from 0-4.

Pilot study

A convenience sample of 40 university students was recruited for the pilot study. Efforts were made to include participants from various academic disciplines, ages, genders, and cultural backgrounds to capture a broad spectrum of experiences. Descriptive statistics were used to analyze the pilot study data, focusing on response rates, completion times, and participant feedback regarding the survey's content and format. The Cronbach's alpha coefficient was also calculated to assess the internal consistency of the survey items.

Note: Students who participated in the pilot study were excluded from the final results of the main study to avoid duplication and ensure the integrity of the data analysis.

Validation of the questionnaires

The translation of all scales from English to Arabic involved a meticulous process. Initially, an English-to-Arabic translation was performed by a mental health specialist, followed by a back-translation into English by another specialist. Subsequently, the translated English versions of the scales were compared to ensure consistency in meaning. An expert committee comprising healthcare professionals and a language specialist further scrutinized the Arabic-translated version. The committee's objective was to identify and resolve any disparities or inconsistencies between the two versions. This forward-back translation process was iteratively repeated until all ambiguities were eliminated. The reliability of the family functioning questionnaire, mental health, and coping strategies were measured by Cronbach's alpha test, which values for the data collection methods mentioned were 0.81, 0.86, and 0.79, respectively.

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Ethical considerations

Throughout the study, great effort was taken to uphold participant rights and research ethics. Every male participant was asked for verbal agreement, during which they were assured that their privacy would be protected and that the information gathered would only be utilized for the study. They were assured that the study would remain anonymous and they might leave at any moment. The Institutional Review Board of Najran University approved this study.

Data Collection procedures

The data collection procedures for this study occurred from February 2023 to August 2023. Initially, the researchers held meetings with the participants to explain the objectives of the study clearly and to assure them of the confidentiality of their information. This phase of the data collection process typically took between 20 to 25 minutes per participant.

The data collection itself was carried out using a combination of methods. Firstly, face-to-face surveys were

conducted at public locations where participants were approached and asked to participate in the study. Additionally, the researchers utilized online platforms and social media channels to distribute questionnaires, allowing participants to complete the surveys remotely. This dual approach aimed to reach a diverse range of participants and ensure a comprehensive data collection.

Statistical analysis

The collected data underwent sorting, updating, archiving, tabulation, and thorough examination involving numerical values, percentage distributions, means, and standard deviation calculations. The statistical software SPSS version 20 was utilized to conduct relevant statistical analyses, employing chi-square and Spearman correlation tests. Statistical significance was determined at a p-value of < 0.05, indicating notable differences and associations within the data.

Results

Table 1: Frequency distribution of the studied sample according to their Personal data (n=386).

Items	Ν	%
Age		
18-20	204	52.8
More than 20	182	47.2
Gender		
Male	250	64.7
Female	136	35.3
Academic year		
$1^{\text{st}}-2^{\text{nd}}$	211	54.6
3 rd -4 th	175	45.4
Residence		
Rural	221	57.2
Urban	165	42.8

The results presented in Table 1 provide a clear overview of the personal characteristics of the studied sample. The majority of participants are between 18 and 20 years old, comprising 52.8% of the sample, while 47.2% are older than 20. There is a higher proportion of male participants (64.7%) compared to female participants (35.3%). The sample is also well-distributed across academic years, with 54.6% in the 1st-2nd years and 45.4% in the 3rd-4th years. More than half (57.2%) come from rural areas, while 42.8% reside in urban areas. This distribution reflects the diverse backgrounds of the participants, which may be relevant for studies involving geographic factors or differences in access to healthcare resources.

Table 2: Mean Scores across various domains reported by the study sample to assess the family functioning (n=386).

Items	Range	mean	SD
How often do family members engage in open and honest communication?	0-4	1.9	1.1
How effectively does your family resolve conflicts or disagreements?	0-4	1.6	1.3
Do family members have clear roles and responsibilities within the household?	0-4	2.9	0.8
To what extent do family members support and encourage each other?	0-4	2.4	1.1
How connected do you feel to your family members?	0-4	3.1	0.4
How flexible is your family in adapting to changes and challenges?	0-4	2.3	1.1
How comfortable are family members in expressing their emotions?	0-4	1.4	0.9
How often does your family spend quality time together?	0-4	3.1	0.8
How often does your family value your personal views?	0-4	1.8	1.4

Table 2 presents the mean scores across various domains related to family functioning, as reported by the studied sample. Regarding open and honest communication, the mean score is 1.9. The mean of conflict resolution is 1.6. Regarding emotional expression, the mean score of 1.4 suggests that family members are relatively discomfortable in expressing their emotions. While regarding clear roles and responsibilities, the mean score of 2.9 indicates that most families perceive having clear roles and responsibilities within the household. In relation to quality time together, the mean score of 3.1 suggests that families often spend quality time together.

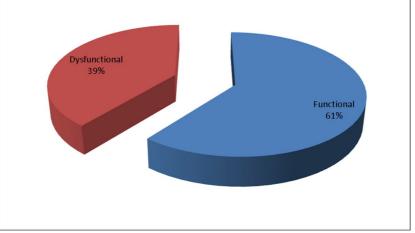


Figure 1: Frequency distribution to the families according to functional status Figure 1 shows that about two-thirds of the families (61%) are functional compared to 39% are dysfunctional

Table 3: Mean Scores across various domains of mental health as reported by the studied sample (n=386)

Items	Range	mean	SD
Emotional Well-being			
I feel happy and content most of the time.	0-9	6.2	1.3
I am able to cope with stress effectively.	0-9		1.5
I experience a sense of fulfillment in my daily activities.			
Social Well-being			
I have meaningful relationships with peers and friends.	0-9	5.8	1.7
I feel connected to the university community.	0-9		1.7
I am comfortable expressing myself in social situations.			
Academic Well-being			
I feel motivated to pursue my academic goals.	0-9	5.4	1.6
I am satisfied with my academic performance.	0-9		1.0
I have a sense of purpose and direction in my studies.			
Physical Well-being			
I engage in regular physical activity or exercise.	0-9	6.3	1.3
I prioritize my physical health and well-being.	0-9		1.5
I get enough rest and sleep to feel refreshed.			
Cognitive Well-being			
I am able to concentrate and focus on tasks.	0-9	5.9	1.4
I feel mentally sharp and alert.	- 0-9		1.4
I am confident in my problem-solving abilities.			
Spiritual Well-being			
I have a sense of meaning and purpose in life.	0-9	6.1	1.6
I engage in activities that nurture my spiritual beliefs or values.			1.0
I feel a sense of inner peace and harmony.			
Total	0-54	37.2	8.5

Table 3 represents various mental health domains as reported by the studied sample. Regarding emotional well-being, the mean is 6.2, social well-being is 5.8, academic well-being is 5.8, physical well-being is 6.3, cognitive well-being is 5.9, and spiritual well-being is 6.1.

Table 4: Frequency distribution of the studied sample regarding their risk to mental health problems (n=386)

Items	Ν	%
Free	200	51.8
Moderate risk	76	19.7
Higher risk	110	28.5

Table 4 shows the distribution of the studied sample regarding their risk of mental health problems. The table reveals that 51.8% are free, 19.7% are at moderate risk, and 28.5% are at high risk to mental health problems.

Table 5: Frequency distribution of the studied sample regarding their use of the coping mechanisms (n=386)

Items	Ν	%
Satisfactory	180	46.6
Average	76	19.7
Unsatisfactory	130	33.7

Table 5 reveals the frequency distribution of the studied sample regarding their use of the coping mechanisms. The data shows that 46.6% have a satisfactory level, 19.7% have an average level, and 33.7% have an unsatisfactory level.

Items	likely to ment	likely to mental health problems	
	r	р	
Functioning of the family	76	0.0001	
Use of coping mechanisms	54	0.003	

Table 6: correlation between likely mental health problems among the studied sample with the functioning of the family and the use of coping mechanisms (n=386)

Table 6 identifies the correlation between likely mental health problems among the studied sample with the functioning of the family and the use of coping mechanisms. The table shows that the strong negative correlation coefficient of -0.76 indicates a significant and inverse relationship between the functioning of the family and the likelihood of mental health problems. The moderate negative correlation coefficient between the use of coping mechanisms and the likelihood of mental health problems is evidenced by R=-0.54 and P=0.003.

Discussion

This study aimed to explore the association between dysfunctional family dynamics, mental health struggles, and coping strategies among university students. The current study reported that two-thirds of the families were functional compared to about one-third was dysfunctional. The current study was supported by the Chinese study conducted by Jiang et al. (2023) and Pan et al. (2021), which reported that about two-thirds of the families were normal.

Regarding the distribution of the studied sample according to their likelihood to mental health problems, the present study revealed that 51.8% are free, 19.7% are at moderate risk, and 28.5% are in high risk to mental health problems. The present study was supported by (Campell et al., 2022; Sivertsen et al., 2019), who reported that the prevalence of mental health problems among university students is about one-fifth.

Regarding coping mechanisms use, the current study revealed that less than half of the studied sample had satisfactory levels. Similarly, the study conducted in Qatar on medical students reported average use of coping mechanisms. The most used strategies were religion, planning, and acceptance (Slah Eddine and Adawi, 2020). Along the same line, Sheroun et al. (2020), who assessed the coping mechanisms among the students in the College of Nursing, reported that half of the students had a satisfactory level of using the coping strategies.

The findings presented in the study shed light on the correlation between mental health issues, family functioning, and coping mechanisms within the studied sample. The data reveals a robust negative correlation coefficient of -0.76, indicating a substantial and inverse association between family functioning and the probability of experiencing mental health problems. This suggests that a healthier and more supportive family environment may contribute significantly to lower instances of mental health challenges among individuals. The current study was supported by Behere, Basnet, and Campbell (2017), who found a dysfunctional family is a significant risk factor for mental health problems among siblings. The current study was in agreement with Yampolskaya, Mowery, and Dollard (2013), who concluded that a healthy family is a protective factor against mental health problems among children.

Additionally, the current study illustrated a moderate negative correlation coefficient of R= -0.54 and P= 0.003 concerning the use of coping mechanisms and the likelihood of encountering mental health issues. This implies that individuals who employ effective coping strategies may experience a reduced risk of developing mental health problems. These results underscore the importance of familial support and effective coping mechanisms in promoting mental

well-being and mitigating the impact of stressors or challenges. Similarly, a study conducted in Dhaka city, Bangladesh, by **Billah et al. (2023)** explored the importance of using coping mechanisms by university students to reduce the severity of anxiety and stress attacks. Along the same line, **Scorsolini-Comin et al. (2021)** reported that using coping strategies as a religious practice is correlated with lower scores of mental health problems. They added that coping strategies can act as protective factors.

Limitations of the study

The study is subject to several limitations that could affect the interpretation and generalizability of its findings. Firstly, using a convenience sample in the study introduces sampling bias. Secondly, the data collected through selfreported questionnaires may have the potential for selfreporting bias. Respondents may provide socially desirable responses or inaccurately recall information related to family dynamics, mental health, and coping strategies, which could introduce biases into the results. Moreover, the cross-sectional design of the study poses a limitation in establishing causal relationships between dysfunctional family dynamics, mental health issues, and coping strategies.

Conclusion

The study underscores the crucial role of family dynamics in influencing mental health outcomes among university students. Dysfunctional family environments were associated with increased risks of mental health problems. Conversely, effective coping strategies were linked to lower mental health risks. These findings emphasize the importance of addressing family dynamics and promoting adaptive coping strategies to support the mental well-being of university students.

Recommendations

Based on the study's findings, interventions targeting family dynamics should be developed and implemented within university settings. Educational programs aimed at enhancing coping skills and resilience among students should also be prioritized. Additionally, mental health support services should be readily accessible to students, with an emphasis on early detection and intervention for those at higher risk.

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