

THE MENTAL HEALTH AND ITS RELATIONSHIP WITH THE QUALITY OF LIFE AMONG ALGERIAN UNIVERSITY STUDENTS. «SYSTEMATIC REVIEW AND META-ANALYSIS »

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Abstract:

Objective: This study aimed to explore the relationship between mental health and quality of life among Algerian university students using a multidimensional analysis approach, building upon the findings of previous studies.

Methods: the following electronic databases were searched: ResearchGate, ASJP and Google Scholar. The search strategy and keywords were defined for the period between 2013 and 2023. After the identification process and screening based on inclusion and exclusion criteria, four studies were identified.

Results: The study revealed a relationship between mental health and quality of life among Algerian university students. Additionally, it found that the levels of mental health and quality of life among Algerian university students were moderate.

Keywords: mental health, quality of life, university students, systematic review, Meta-analysis.

1-Introduction:

The university stage is considered one of the most crucial phases in an individual's life, as it is the time when their academic and professional path becomes clear. During this period, individuals choose their academic specialization, which in turn shapes their career trajectory. Responsibilities also increase, and individuals strive to define themselves and establish their position in society. They engage in contemplating the future, overcoming challenges of the era, and attempting to achieve personal growth.

Moreover, university students represent the present and the future, constituting an elite segment of society that deserves attention and care. Providing the necessary resources and support is essential for ensuring their mental health and he is "not exist on its own. It is an integral and essential part of overall health, which can be defined in at least three ways – as the absence of disease, as a state of the organism that allows the full performance of all its functions or as a state of balance within oneself and between oneself and one's physical and social environment Which of these three definitions is used depends on the level to which the basic health needs are satisfied. These needs include food, shelter, survival, protection,

society, social support, and freedom from pain, environmental hazards, unnecessary stress and from any part of exploitation" (Bhugra et al, 2013, p.3)

mental health is among the relatively modern concepts in positive psychology, a field that focuses on studying the positive aspects of individuals. Among the key positive variables associated with this field and of particular interest is the quality of life, which should be achieved for university students, and no universal quality of life determination. Quality of life is influenced by an individual's physical and mental health, the degree of independency, the social relationship with the environment, and other factors. Quality of life could be defined as an individual's satisfaction with his or her life dimensions comparing with his or her ideal life. The evaluation of quality of life depends on the individual's value system and on the cultural environment where he lives. (Ruževičius, 2014, p.319)

By World Health Organisation (WHO) the Quality of life is a broad concept It can be modified by many factors related to physical health, psychological state, level of independence, social relationships, as well as personality. (Owczarek, 2010, p.5)

Among the dimensions of quality of life, we find mental health, which includes self-acceptance and satisfaction. Physical health encompasses freedom from organic diseases. Social health represents social interaction. The academic aspect includes educational choices and satisfaction with the specialization.

mental health and quality of life for university students are achieved through understanding their needs and goals, reaching them, feeling happiness and satisfaction with themselves and life, avoiding pressures, and knowing how to face them

Therefore, mental health and quality of life are among the important elements that must be provided and achieved for university students to enhance creativity and productivity. In this study, we will attempt to shed light on the reality by examining the relationship between mental health and quality of life, and the levels of each, among Algerian university students. This will be accomplished through the analysis of previous studies using a methodical review and dimensional analysis, guided by the following questions:

Is there a relationship between mental health and the quality of life among Algerian university students?

What is the level of mental health among Algerian university students?

What is the level of quality of life among Algerian university students?

2-Objectives:

The primary objective of the study remains to investigate the relationship between mental health and quality of life among Algerian university students. Additionally, the study aims to assess the levels of mental health and quality of life within the study sample. This will be achieved through a systematic review and dimensional analysis of studies that have examined the relationship between mental health and quality of life among university students.

3-Importances:

The significance of studying the relationship between mental health and quality of life among university students lies in its theoretical perspective and the contributions it will make to scientific research. The study's findings can serve as a foundation for future research or be used as scholarly references. This study derives its importance from the novelty of its variables and the limited research available within the researcher's knowledge. Additionally, the significance stems from the study's sample, representing university students who are

considered an elite segment of society. Furthermore, the study aims to draw attention to the relationship between mental health and quality of life among university students, especially given the widespread psychological issues such as depression, suicidal tendencies, and substance abuse. This indicates a decline in the levels of mental health and quality of life within the sample, necessitating a focus on understanding the relationship to develop counseling programs aimed at improving mental health and enhancing the quality of life of university students.

4-Definition of study terms:

4.1- mental health: "mental health is always a part of the concept of health, which means discussions limited to a certain field would unavoidably fall into confusion. Physical, mental and social well-being interacts with each other and without any part health is incomplete" (Wang, 2022, p.994)

4.2- quality of life: individuals' perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, Expectations and standards and concerns. It is a broad ranging Concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment (Barcaccia et al, 2013, p.189)

4.3- systematic review: A systematic search for data, using a repeatable method. It includes appraising the data (for example the quality of the data) and a synthesis of research data (Nunn et al, 2020, p. 2)

4.4-Meta-analysis: This approach aims to obtain a comprehensive understanding of the contributions of empirical research in a given domain. The statistical index used to standardize the results of various studies and make them comparable is the effect size. For a detailed presentation, you can refer to, for example, a detailed explanation. (Zimmermann, Pomini, 2013)

5- Methods:

5.1-Study Approach: In the current study, a descriptive methodology was adopted, utilizing a systematic review and dimensional analysis. This approach is considered descriptive as it involves describing the reality of previous studies that have addressed the same topic.

5.2- The following stages: were followed, adhering to the guidelines of the American Psychological Association, 7th edition:

5.2.1- The first stage : A quick survey was conducted on the studies published regarding the relationship between mental health and quality of life among university students. It became evident that the majority of these studies are relatively recent. Consequently, the study's objective was defined to explore the relationship between mental health and quality of life among Algerian university students based on the results of previous studies

Studies: The current study community can be defined as all Algerian psychological studies that have adopted the topic of the mental health and its relationship with quality of life among university students.

5.2.2-The second stage involved identifying the keywords and research strategy related to the study's topic. These include

(«mental health») and («quality of life») and («university students»)

The search covered the following databases: ResearchGate, Google Scholar, ASJP. The time frame for the current study was set between 2013 and 2023, covering the last ten years, to

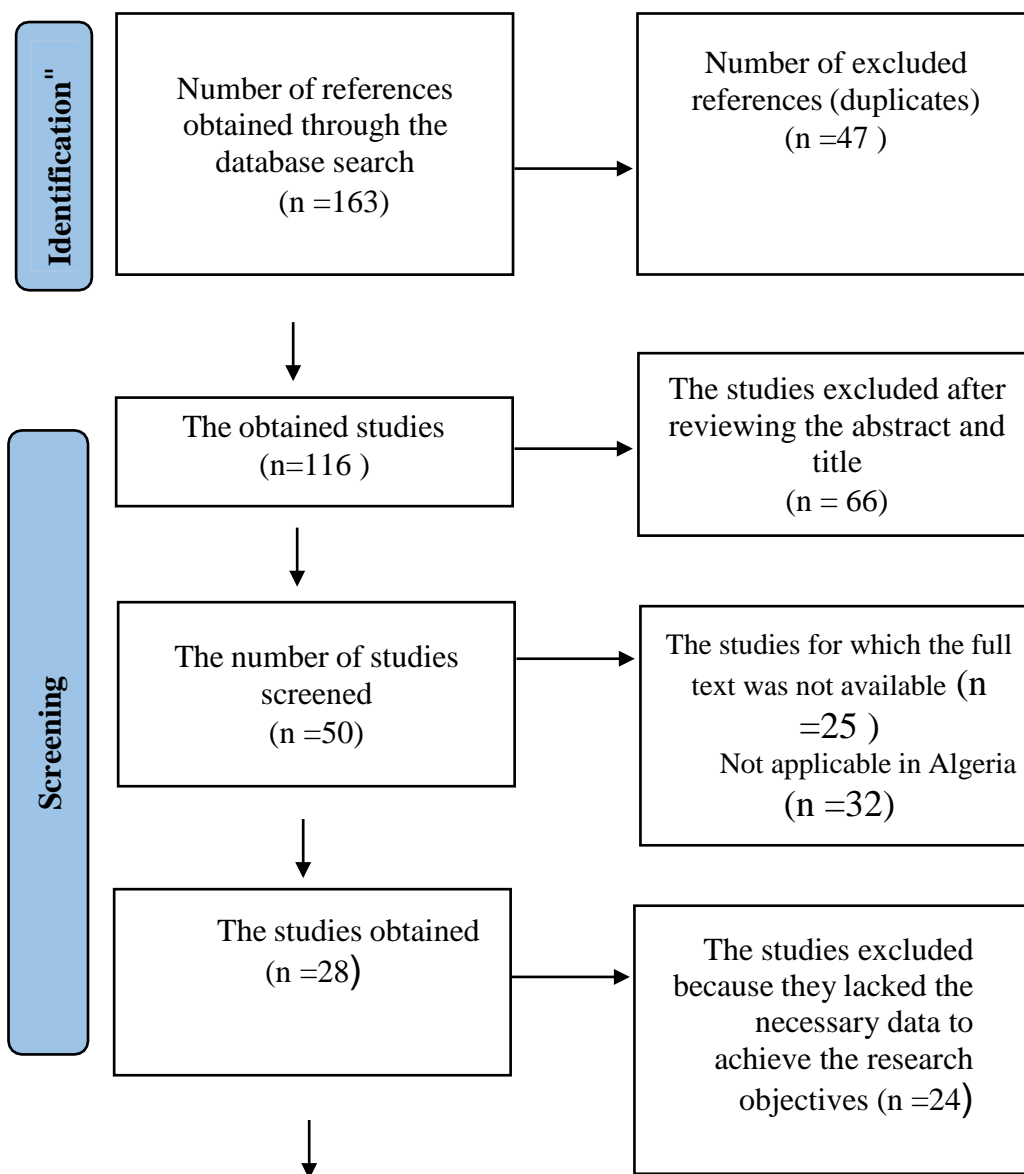
avoid confusion in the obtained results. The search process was conducted in the Arabic language to maintain consistency. This stage concluded with the identification of 163 studies. Inclusion and exclusion criteria were then determined:

- Selection of studies providing full-text access.
- Selection of studies conducted between 2013 and 2023.
- Selection of studies aiming to investigate the relationship between mental health and quality of life among university students.
- Selection of studies targeting university students.
- Selection of studies conducted in Algeria

5.2.3-In the third stage: the web tool Rayyan was utilized for the process of identifying and initial screening of studies, which included examining titles and abstracts. After a thorough examination of the full text to ensure alignment with the current study's objectives, four studies were extracted. The PRISMA diagram in Figure (1) can be referenced for a visual representation of the stages of the study screening process and the number of studies involved. All studies included in the systematic review are listed in the references section.

Figure 1:

Steps for Selecting the Study Sample using the PRISMA Method.



Inclusio

The number of studies
included in the review
(n =04)

5.2.4-Stage Four: Data extraction for each study was conducted, and a summary is presented in Table 01

Table 01:

Summary of Data for Studies Included in the Systematic Review

Author	The year	objective	Sample size
-Bkhoush Nurs -Hmaidani Kharfia	2016	The study aims to assess the levels of both mental health and quality of life and explore the relationship between them. Additionally, it aims to examine differences in these variables based on certain demographic factors.	100
-Ahmed Beloul -Aisha Ala	2016	The study aims to identify the most common dimensions of quality of life among a sample of university students. Additionally, it seeks to assess their level of mental health and investigate whether there is a relationship between the dimensions of quality of life and mental health among the sample	100
-Ben Hamouda Sara	2021	The study aims to explore the relationship between quality of life and mental health. Additionally, it seeks to investigate this relationship based on gender and academic specialization. The study also aims to assess the level of quality of life among Master 2 students specializing in Social Sciences at the University of Ghardaia	50
-Samira Kharmoush -Louiza Farchane	2021	Revealing the reality of the relationship between quality of	536

life and mental health among university students: A case study of Mohamed Boudiaf University.

5.2.5-The fifth stage: In this stage, we presented and discussed the results of the study's research questions:

5.2.5.1 : Presentation and discussion of the results of the first question:

Is there a relationship between mental health and the quality of life among Algerian university students?

To answer this question, correlation coefficients were extracted from the studies included in the systematic review, and the average of these coefficients was calculated. The table below illustrates this:

Table 2:

Correlation Coefficients between mental health and Quality of Life"

The study	The correlation coefficient
-Bkhoush and Hmaidani (2016)	0.35
-Beloul and Ala (2016)	0.97
- Ben Hamouda (2021)	0.32
-Kharmoush and Farchane (2021)	0.85
The average correlation coefficients	0.62

The previous table illustrates the correlation coefficients between mental health and quality of life in the studies included in the systematic review. The highest correlation coefficient was 0.97 in the study by Beloul and Ala (2016), followed by the study by Kharmoush and Farchane (2021) with a value of 0.85. Then, the study by Bkhoush and Hmaidani (2016) had a correlation coefficient of 0.35, and finally, the study by Ben Hamouda (2021) with a coefficient of 0.32. The average correlation coefficient for the mentioned studies was calculated to be 0.62.

-In another step, we calculated the determination coefficient for the correlation coefficients through

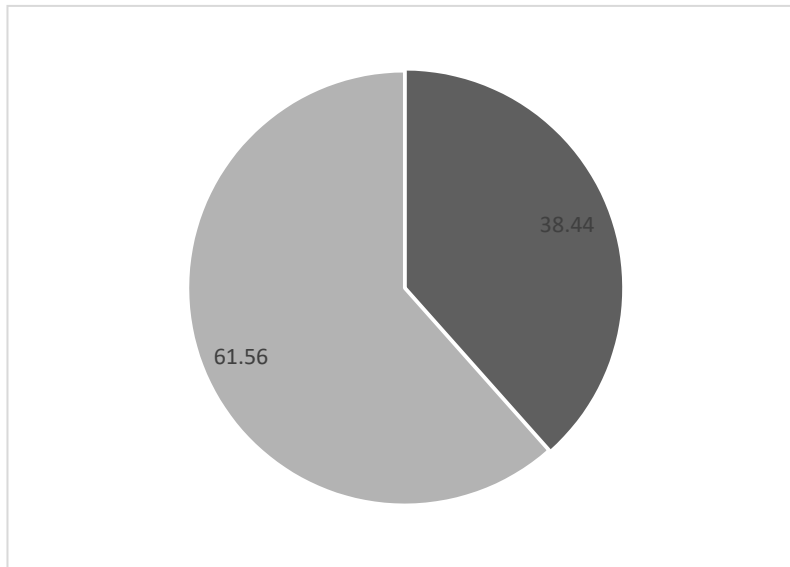
$$r^2 \times 100$$

$$0.62^2 \times 100 = 38.44$$

The determination coefficient for the average correlation coefficients was 38.44, and the following percentage represents the coverage ratio of the correlation between mental health and quality of life among Algerian university students.

Figure 2:

Pie chart representing the relationship between mental health and quality of life among Algerian university students.



The previous figure represents a pie chart illustrating the relationship between mental health and quality of life among Algerian university students. The correlation percentage was 38.44%, representing the proportion of shared characteristics between mental health and quality of life, while 61.56% indicates the specific characteristics of each variable.

The answer to this question involved calculating the average correlation coefficients extracted from the studies included in the systematic review, which amounted to 0.62. After calculating the determination coefficient for this value, it became evident that it covers 38.44% of the relationship between mental health and quality of life among Algerian university students. This percentage represents the shared characteristics between mental health and quality of life, indicating a close relationship between these variables. mental health is considered one dimension of quality of life, and both are manifested in common Satisfaction with life and self, optimistic outlook, and psychological security. Moreover, quality of life reflects the satisfaction of needs in general, including psychological needs that contribute to mental health.

We also find the definition of quality of life by the World Health Organization, which includes psychological state, social relationships, personal beliefs, and the relationship with the environment in general. All these factors contribute to achieving mental health.

5.2.5.2 : Presentation and discussion of the results of the second question:

What is the level of mental health among Algerian university students?

In order to answer this question, the arithmetic means of individuals' scores on mental health scales were converted into percentages. Then, the average percentages were calculated. The following table represents the detailed results:

Table 3:

Percentage Scores for Individuals' Arithmetic Means on mental Health Scale

The study	The percentage scores
-Bkhoush and Hmaidani (2016)	%01.15
-Beloul and Ala (2016)	%80.54
- Ben Hamouda (2021)	%05
-Kharmoush and Farchane (2021)	%54.80
The average percentage scores	%88.45

The table above represents the percentage scores for the average grades of students on mental health scales. The highest percentage was 51.10% in the study by Bakhous and Hmaidan (2016), followed by the study by Ben Hamouda (2021) with an average percentage of 50%, then the study by Beloul and Ala (2016) with a percentage of 45.68%, and finally the study by Kharmoush and Frashan (2021) with a percentage of 28.45%. The average percentage was 43.80%.

The average percentage of students' grades on mental health scales is 43.80%. This indicates that the level of mental health among Algerian university students is moderate. These results can be attributed to the fact that mental health is a self-report, relying on an individual's perception of various aspects affecting mental health. According to the traditional definition, mental health is the absence of pathological symptoms. However, in the modern perspective, it is not just the absence of illness; it also encompasses psychological, physical, and social aspects. Achieving these elements leads to enjoying mental health for university students.

Factors such as the inability to cope with responsibility, challenges, academic pressures, and interpersonal conflicts among students contribute to feelings of anxiety, helplessness, and obstacles hindering academic and professional goals. All of these factors can diminish the sense of fulfillment and happiness, ultimately impacting mental health.

5.2.5.3 : Presentation and discussion of the results of the third question:

What is the level of quality of life among Algerian university students?

For answering this question, the arithmetic means of individuals' scores on quality of life scales were converted to percentages. Then, the average percentages were calculated, and the following table represents the results in a kind of detail:

Table 4:

Percentage Ratios of Arithmetic Means of Individuals' Scores on Quality of Life Scales.

The study	The percentage scores
-Bkhoush and Hmaidani (2016)	%85.85
-Beloul and Ala (2016)	%85.85
- Ben Hamouda (2021)	%05
-Kharmoush and Farchane (2021)	%04.08
The average percentage scores	%05.88

The previous table represents the percentage ratios of the arithmetic means of individuals' scores on quality of life scales. The highest ratio was 58.53%, observed in the study by Kharmoush and Farshan (2021), followed by the study by Ben Hamouda (2021) with a ratio of 50%. Meanwhile, the studies by Bakhoush and Hmaidan (2016) and Beloul and Oula (2016) achieved the same ratio of 46.42%. The average percentage ratio was 50.34%.

From the above, it is evident that the average percentage ratio of students' scores on quality of life scales is 50.34%. This indicates that the level of quality of life among Algerian university students is average. These results can be attributed to the fact that the quality of life measure is a self-report on the perceived quality of various aspects of life from the students' perspective. It depends on the individual's outlook on life, reflecting their awareness of their capabilities, opportunities, and how they utilize them, Despite university students being in a stage of giving, productivity, and creativity, it is also a period of pressures and conflicts, given

the separation from home, entering dormitories, and the added stress of thinking about the future and job opportunities. The financial instability at this stage somewhat diminishes their sense of quality of life.

Conclusions:

the study's conclusions indicate a relationship between mental health and quality of life among Algerian university students. This is confirmed through the analysis of previous studies using a methodological review and dimensional analysis. The study results showed that the levels of mental health and quality of life in the sample were moderate and comparable. Despite continuous efforts to ensure complete objectivity in this review, there are limitations that should be noted. These include the exclusion of the analysis of studies published in languages other than Arabic. Additionally, the approach adopted focused on electronic sources, which may somewhat impact the comprehensiveness of the research by not including non-electronic references.

Based on the findings of our study, we recommend giving adequate attention to research studies that rely on methodological reviews and dimensional analysis. We suggest conducting further studies on the mental health and quality of life of university students, with an aim to enhance and provide support for this

References:

- Ahmed, Beloul, and Alla, Aisha. (2016). Dimensions of quality of life and their relationship to mental health in a sample of University of Guelma students. *Hakiqat Journal of Psychological and Social Studies*, 1(2), 167-188. <https://www.asjp.cerist.dz/en/article/125898>
- American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed). American Psychological Association.
- Barcaccia, Barbara, & Esposito, Giuseppe, & Matarese, Maria, & Bertolaso, Marta, & Elvira, Marta, & De Marinis, Maria Grazia. (2013). Defining Quality of Life: A Wild-Goose Chase?. *Europe's Journal of Psychology*, 9 (1), 185- 203. <https://ejop.psychopen.eu/index.php/ejop/article/view/484/484.pdf>
- Bhugra, Till, & Dinesh Alex, & Sartorius, Norman. (2013). What is mental health?. *International Journal of Social Psychiatry*, *International Journal of Social Psychiatry*, 59 (1), 3-4. https://www.researchgate.net/publication/235371865_What_is_mental_health
- Hamidani, Kharfia, and Bekhouch, Nour. (2016). Quality of life and its relationship to mental health among female students at Ziane Achour University [Master's thesis, Ziane Achour University, Guelma]. <http://dspace.univ-djelfa.dz>
- Nunn, Jack, & Chang, Steven et al. (2020). What are Systematic Reviews?. *WikiJournal of Medicine*, 7(1), 1-11. <https://www.researchgate.net/publication/346796621>
- Owczarek, Krzysztof . (2010). THE CONCEPT OF QUALITY OF LIFE. *ACTA NEUROPSYCHOLOGICA*, 8(3), 1-8. : <https://www.researchgate.net/publication/289641702>
- Ruževičius, Juozas. (2014, August, 28-29). Quality of Life and of Working Life: Conceptions and Research [Advance research]. 17th Toulon-Verona International Conference, Liverpool John Moores University.
- Samira, Kharmoush, and Louiza, Farshan. (2021). Quality of life and its relationship to mental health among university students. *Al-Jame Journal of Psychological and Educational Sciences*, 6(1), 498-522. <https://www.asjp.cerist.dz/en/downArticle/309/6/1/153859>

Sara Ben Hamouda. (2021). Quality of life among university students and its relationship to mental health [Master's thesis, University of Ghardaia].<http://dspace.univ-ghardaia.dz>

Zimmermann, G, & Pomini, V. (2013). Méta-analyse et efficacité des psychothérapies : faits et fictions. *Psychologie française*,3 (58) 167–175. <https://doi.org/10.1016/j.psfr.2012.12.002>