

RESEARCH ARTICLE

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Psychological Needs and Mental Health among High School Students

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Abstract:

This study aimed to examine the relationship between psychological and social needs and mental health among high school students. The sample included 77 students from the first, second, and third grades in Ghardaia. The descriptive method was employed, using the Psychological Needs Scale by Deci and Ryan and the Mental Health Scale by Omar Al-Shwashra and Tarek Jit, after adaptation and validation.

Results revealed a positive correlation between the Satisfaction of psychological needs and mental health, with students showing moderate psychological needs and high mental health levels. No statistically significant differences were found based on gender or grade level.

Keywords: psychological needs- mental health- high school

1. Introduction

Adolescence is a pivotal stage in human development, marking the journey from childhood to adulthood. It is a time of rapid changes—biological, cognitive, social, and

emotional—that shape an individual's sense of identity and drive toward independence. During this period, adolescents face many challenges as they try to understand themselves and navigate their environment, making this stage crucial for laying the foundations of their psychological and social well-being (Abbas, 2003).

Meeting psychological needs—such as security, love and belonging, self-esteem, and self-actualization—is essential for maintaining emotional balance and guiding behavior (Ben Tatta, 2021). When these needs are fulfilled, adolescents are better equipped to cope with challenges, build healthy relationships, and develop confidence. On the other hand, unmet needs can lead to anxiety, low self-esteem, and behavioral difficulties. For example, feeling a sense of belonging helps adolescents form positive connections with family and peers, while achieving recognition and esteem strengthens their self-confidence.

The World Health Organization (2005) defines mental health as a state of emotional and cognitive well-being that enables individuals to adapt effectively to everyday life, engage in positive thinking, and maintain appropriate behavior. Research has shown that when

adolescents' psychological needs are not met, their academic performance, social interactions, and overall quality of life can be negatively affected (Manasrah, 2015; Abdel Bari, 2004; Fahmy, 1995).

Although much research has explored the link between psychological needs and mental health, field studies remain essential, given that this relationship can vary across different social and environmental contexts. This study, therefore, seeks to explore whether there is a significant correlation between the satisfaction of psychological needs and mental health among high school students. This study was conducted to answer the following questions

1. To what extent is there a correlation between psychological needs satisfaction and mental health among high school students?
2. What is the level of psychological needs satisfaction among high school students?
3. What is the level of mental health among high school students?

2. Definition of Psychological Needs:

Al-Johari (2006) defined psychological needs as a state of tension and psychological imbalance experienced by an individual due to the loss of something considered essential for their psychological equilibrium. This state motivates the individual to act persistently until they obtain what is missing and satisfy their needs, thereby restoring their balance and mental calmness.

Maslow (1908–1970) defined psychological needs as a set of innate needs arranged hierarchically according to their strength and effectiveness. This hierarchy begins with physiological needs and culminates with self-actualization. Satisfying these needs follows this hierarchical order, and a person's inability to fulfill them can lead to frustration, tension,

and psychological distress (Rafe' Al-Zaghlool, Abd El-Salam, & Al-Dabbabi, 2019).

Operationally, in the present study, psychological needs are defined as the total score a student obtains on the psychological needs scale used in this research.

3. Definition of Mental Health

Mental health is considered a dynamic concept influenced by multiple factors, including an individual's behavior and cognitive and emotional balance. It cannot be evaluated based on a single moment or outward appearance alone, as its understanding depends on cultural and social context, which leads to multiple definitions. Zahran (1986) defines mental health as "a positive state encompassing soundness of mind and proper behavior, rather than merely the absence of psychological disorders."

According to the World Health Organization (2005), mental health is "a state of well-being in which an individual realizes their abilities, can cope with the normal stresses of life, work productively, and contribute to their community. It is not merely the absence of disease or disability, but a positive sense of integration of physical, mental, and social well-being, which forms the foundation for individual and societal functioning and wellness."

Operationally, in the present study, mental health is defined as the total score a student obtains on the mental health scale adopted in this research.

4. Research Methodology

The present study adopted the descriptive method due to its suitability for the nature of the research problem, which aims to examine the relationship between psychological needs and mental health. This method allows for the description of variables and the analysis of the relationships between them based on quantitative data, contributing to an objective and precise interpretation. The method is defined as "an organized set of processes

aimed at achieving a specific goal" (Morris, 2019, p. 98).

4-1 Population and Sample of the Study

In scientific research, the study population refers to the group of individuals or elements that share one or more characteristics and are defined according to specific criteria set by the researcher to align with the study objectives. The study population represents the primary domain from which the researcher seeks to collect relevant data and information. Based on this, the population of the present study was determined to include high school students. The total number of students in the first high

school (males) was 429, while in the second high school (females) it was 194.

Since a sample represents a portion of the study population, a random sampling method was employed to select its members, as it provides equal opportunities for all individuals in the population to be chosen without bias. This enhances the representativeness of the sample and increases the credibility of the obtained results (Ben Al-Sheikh, 2014, p. 46). The sample was selected to ensure that its characteristics matched those of the original population, allowing for the study and analysis of its demographic features in light of the research variables.

Table 01 shows the distribution of the study sample by gender

Variable	Catégorie	Frequency	Percentage (%)
Gender	Male	38	49.4
	Female	39	50.6
Total		77	100

The number of males was 38 (49.4%), while females numbered 39 (50.6%) out of the total sample of 77 students. The proportions between genders are nearly equal, reflecting a relative balance in the representation of males and females within the sample.

Table 02: Distribution of the Sample by Educational Level

Variable	Catégorie	Frequency	Percentage (%)
Educational Level in Secondary School	First Year	31	40.3
	Second Year	22	28.6
	Third Year	24	31.2
Total		77	100 %

The table illustrates the distribution of the study sample according to the variable of educational level. The percentage of first-year secondary school students was 40.3%, followed by third-year secondary school students at 31.2%, and second-year secondary school students at 28.6% of the total sample of 77 students. This distribution indicates an acceptable

representation of the various educational levels within secondary school, allowing the study of the research variables across different grade levels and enhancing the comprehensiveness and accuracy of the results.

5. Study Instruments

5-1. Psychological Needs Scale:

The study utilized the Psychological Needs Scale developed by Deci and Ryan, with reference to the translated and standardized version by Mohamed Alyan. This scale was

employed to measure the level of psychological needs satisfaction among the study sample with accuracy and objectivity.

Table 03: Description of the Psychological Needs Scale

Dimension	Number of Items	TOTAL
Need for Autonomy	1–7	7
Need for Compétence	8–13	6
Need for Relatedness	14–21	8
Total	21	21

The table illustrates the distribution of the items of the Psychological Needs Scale across its three dimensions. The Need for Autonomy consists of 7 items, the Need for Competence includes 6 items, and the Need for Relatedness comprises 8 items, bringing the total number of items to 21. This distribution reflects the scale's focus on the core aspects of adolescents' psychological needs and allows each dimension to be assessed independently, facilitating an accurate and objective analysis

of the levels of psychological needs satisfaction.

5-2. Mental Health Scale

The study utilized the Mental Health Scale developed by Omar Al-Shwashra and Tareq Jeet, which allows for the assessment of various aspects of individuals' mental health with accuracy and objectivity. This scale contributes to analysing the relationship between mental health and psychological needs.

Table 04: Description of the Mental Health Scale

Dimension	Number of Items	TOTAL
Self-Satisfaction	1–13	13
Comfort in Relationships with Others	14–21	8
Ability to Cope with Life's Demands	22–28	7
Psychological Well-Being	29–46	19
Total	46	46

The table illustrates the distribution of the items of the Mental Health Scale across its different dimensions, with each dimension representing a specific aspect of individuals' mental health. The Psychological Well-Being dimension includes the largest number of items (19), reflecting its importance in assessing overall psychological balance. The Self-Satisfaction dimension consists of 13 items, highlighting the individual's ability to

appreciate themselves and achieve personal aspirations. The Comfort in Relationships with Others dimension includes 8 items, indicating the individual's capacity for positive social interaction, while the Ability to Cope with Life's Demands dimension comprises 7 items, reflecting the individual's level of adaptation to daily pressures and challenges. This distribution demonstrates the comprehensiveness of the

scale in measuring the various aspects of mental health.

6. Scope of the Study

Temporal and Human Boundaries: The exploratory phase of the study, during which the scale was distributed, was conducted on February 15 and collected on February 25. The main field study took place from April 30 to May 21, 2024, with a focus on the students included in the predetermined sample. This timeframe and selected population define the temporal and

human boundaries of the study, ensuring that the findings accurately reflect the characteristics of the targeted sample.

7. Presentation and Analysis of the Study Results

7-1. Presentation and Analysis of the First Hypothesis:

The first hypothesis states that there is a correlation between the level of psychological needs satisfaction and mental health among high school students.

Table 05: Pearson Correlation Coefficient Between the Level of Psychological Needs Satisfaction and Mental Health

	Pearson Correlation	Degrees of Freedom	P-Value	Significance Level
Psychological Needs Satisfaction	0.688	75	0.000	Significant at 0.01
Mental Health				
Psychological Needs Satisfaction				
Mental Health				

Table 05 shows a statistically significant positive correlation between psychological needs satisfaction and mental health ($p = 0.000 < 0.01$). This indicates that higher satisfaction of psychological needs is associated with better mental health among high school students, supporting Maslow's theory that fulfilling basic needs enhances psychological

well-being and promotes positive behavior and social functioning.

7-2. Presentation and Analysis of the Second Research Question:

The second research question examines the level of psychological needs satisfaction among high school students.

Table 06: Range of the Weighted Mean for the Five-Point Likert Scale

Weighted Mean Range	Corresponding Level
1–2.33	Low
2.34–3.67	Medium
3.68–5	High

This question examines the level of psychological needs satisfaction among high school students. Based on the five-point Likert scale, scores were classified as low (1–2.33), medium (2.34–3.67), and high (3.68–5).

The analysis of means and standard deviations shows variability in need fulfillment

across dimensions. Satisfaction levels are influenced by social and familial support, as well as the rapid psychological and physiological changes of adolescence, which affect adolescents' perception and expression of their needs.

7-3. Presentation and Analysis of the Third Research Question:

The third research question examines the **level of mental health among high school students**.

Table 07: Range of the Weighted Mean for the Five-Point Likert Scale

Weighted Mean Range	Corresponding Level
1–2.33	Low
2.34–3.67	Medium
3.68–5	High

Table 07 shows the classification of weighted mean levels for the five-point Likert scale:

- Low (1–2.33): Weak satisfaction of psychological needs.
- Medium (2.34–3.67): Moderate satisfaction of psychological needs.
- High (3.68–5): High satisfaction of psychological needs.

This classification is essential for analyzing scale results, identifying areas needing additional support, and accurately interpreting the level of psychological needs satisfaction among high school students.

The moderate level observed is attributed to multiple factors, including social and familial support, such as the family's ability to understand and accept the adolescent, as well as students' attempts to recognize and express their needs. Additionally, the rapid physical, psychological, and social changes characteristic of adolescence may cause hesitation in expressing needs, leading to partial fulfillment. Therefore, a moderate level highlights the importance of providing a supportive environment to help adolescents recognize and satisfy their needs, promoting mental health and emotional and social balance.

needs fulfillment reflects social, familial, and developmental factors typical of adolescence. These findings emphasize the importance of implementing supportive educational and psychological strategies in schools, such as fostering autonomy, self-expression, and positive social interactions, to enhance adolescents' mental health and promote balanced personal and social development.

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Conclusion

The study highlights the crucial role of psychological needs in promoting mental health among high school students, showing a positive correlation between needs satisfaction and mental well being. The moderate level of

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