

Mental Health and School Adjustment among Fourth-Year Middle School Students

Hamouda Hamouda Ali Hadjer¹, Behir Hamza²

¹Psychological and Social Research Laboratory, University of Medea, Algeria

¹Email: hamouda.alihadjer@univ-medea.dz

²University of Algiers 2, Algeria

²Email: hamza.behir@univ-alger2.dz

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Abstract

This study investigates the relationship between mental health and school adjustment among fourth-year middle school students at Ahmed Ziani Middle School in Blida, Algeria. Utilizing a descriptive correlational approach, data were gathered from a randomized sample of 80 students (41 males and 39 females) using a structured questionnaire measuring mental health and school adjustment. Parametric statistical analyses—including Pearson correlation coefficient, independent samples t-test, and one-way ANOVA via SPSS 26—revealed a statistically significant, very strong positive correlation between mental health and school adjustment ($r = 0.920$, $p < 0.001$). Furthermore, statistically significant gender differences were identified, favoring females in overall mental health indicators. The general level of mental health among the targeted cohort fell within the moderate range ($M = 29.4$). These empirical findings underscore the critical necessity of integrated school mental health services and tailored psychological counseling to foster cognitive, emotional, and academic adaptation during early adoles

Keywords: Mental Health, Schooling Adolescent, School Adjustmentence.

1. Introduction & Research Problem

Human beings exist within dynamic environments that continuously present various psychological, social, and environmental challenges requiring high levels of resilience, coping strategies, and psychological well-being. Failure to achieve psychological balance and harmony exposes individuals to severe difficulties concerning their mental, emotional, and social health. Mental health serves as a fundamental pillar for comprehensive human development, representing a state of psychological, cognitive, and social equilibrium that enables positive adaptation to oneself and the surrounding environment.

Modern societies increasingly recognize the imperative role of psychological well-being across all educational and social institutions. Mental health plays a decisive role in shaping human personality, driving healthy physical, psychological, and intellectual growth. In recent years, rapid technological advancement, societal transformations, and multifaceted crises across health, economic, and educational spheres have elevated stress levels among schooling adolescents. Students enrolled in educational

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institutions strive to adapt to these physiological, psychological, and social changes while aiming to fulfill personal ambitions, achieve autonomy, build self-identity beyond family reliance, and engage constructively with society.

Psychological well-being is as crucial as physical health. Within the academic realm, well-being stems from achieving positive adjustment, attaining educational goals, and building a sustainable future. However, students frequently encounter academic stressors and psychological burdens that impact their psychological architecture. Educational institutions are no longer mere venues for knowledge transmission; their primary modern function is to provide a safe, nurturing environment that fosters cognitive, emotional, and social growth within positive adaptation indicators.

Adolescence represents a critical developmental stage characterized by severe emotional turbulence, academic anxiety, and physical transformations. High levels of psychological adjustment enhance motivation toward learning, whereas compromised mental health correlates with severe adjustment deficits. School adjustment encompasses not only academic performance but also positive social interaction with peers and teachers, as well as a genuine sense of institutional belonging. Therefore, this study explores the dynamic interaction between mental health and school adjustment to establish evidence-based strategies for enhancing student well-being and academic success.

2. Research Questions

- **Primary Question 1:** Is there a statistically significant relationship between mental health and school adjustment among fourth-year middle school students?
- **Primary Question 2:** Are there statistically significant differences in mental health and school adjustment attributable to the gender variable?
- **Primary Question 3:** What is the prevailing level of mental health among fourth-year middle school students?

3. Research Hypotheses

- **Hypothesis 1:** There is a statistically significant relationship between mental health and school adjustment among fourth-year middle school students.
- **Hypothesis 2:** There are statistically significant differences in mental health and school adjustment attributable to the gender variable.
- **Hypothesis 3:** The overall level of mental health among fourth-year middle school students is moderate.

4. Operational Definitions

- **Mental Health:** A constellation of psychological and emotional indicators that enable an individual to achieve internal balance and environmental harmony, measured operationally by the total score obtained on the Mental Health Scale administered in this study.
- **Schooling Adolescent:** Students undergoing the developmental stage of adolescence within an institutional educational framework, characterized by rapid biological, emotional, and cognitive transformations.
- **School Adjustment:** The student's ability to achieve harmony, behavioral compliance, positive interactions with peers and teachers, and constructive attitudes toward the curriculum and school environment, operationalized via the composite score on the School Adjustment Scale.

5. Literature Review

5.1 Studies on Mental Health

1. **Mansouri (2018):** Examined mental health levels among secondary school students in Bouira Province using a descriptive analytical approach on a random sample of 200 students. Utilizing the Mental

Health Scale (Al-Zubeidi & Al-Hazzaa, 1997), the study revealed moderate mental health levels across the sample, emphasizing the necessity of realistic goal formulation and counseling interventions.

2. **Al-Arabi & Shallali (2019):** Investigated mental health levels among second-year secondary school students in Laghouat across gender and academic stream. Analyzing 464 students using the Al-Quraiti & Al-Shakhs Scale (1992), results indicated low overall mental health, with statistically significant differences favoring females, while academic stream yielded no significant variance.

3. **Hooli (2013-2014):** Explored school climate and its relationship to mental health among 978 middle and secondary students in Ouargla. Results revealed a significant positive correlation between school climate and mental health, no gender differences, higher mental health among rural students compared to urban peers, and superior scores among high school students over middle schoolers.

4. **Fatima Omar Al-Tahir (2007):** Investigated mental health and academic achievement among 288 high school students in El-Obeid based on maternal employment. Utilizing the Cornell Medical Index adapted by Ismail & Abdel-Hamid, findings indicated lower mental health scores among children of working mothers, significantly higher mental health scores in females compared to males, and no direct correlation between mental health and academic achievement.

5.2 Studies on School Adjustment

1. **Atef Al-Agha (1989):** Investigated the prevailing institutional climate and school adjustment among 200 education students at the Islamic University of Gaza. Employing Al-Dirini's School Adjustment Scale, the study demonstrated that campus climate directly dictates student academic adaptation.

2. **Quraishi (2002):** Analyzed anxiety and its relationship to school adjustment and academic achievement among first-year secondary students in Ouargla. Results indicated no direct correlation between anxiety and academic adjustment, though significant gender differences in compliance emerged favoring females under high-anxiety conditions.

3. **Amani Muhammad Nasser (2006):** Examined school adaptation among high and low academic achievers in Damascus. Findings demonstrated that females exhibited significantly higher school adaptation than males, third-year high school students adapted better than second-year students, and high achievers displayed superior overall adaptation.

4. **Ben Douma (2006):** Evaluated self-concept, school adjustment, and aggressive behavior among 364 secondary students. Applying standardized psychological metrics, the study established significant interrelationships between positive self-concept, higher school adjustment, and diminished aggressive tendencies.

6. Research Methodology & Procedures

To examine the research problem with scientific precision, a quantitative descriptive correlational methodology was selected. This design allows for measuring the strength and direction of relationships between variables without external manipulation.

6.1 Geographic, Temporal, and Human Boundaries

- ☐ **Spatial Boundary:** Ahmed Ziani Middle School, Blida Province, Algeria.
- ☐ **Temporal Boundary:** Conducted from April 4, 2025, to May 5, 2025.
- ☐ **Human Boundary:** Fourth-year middle school students.

6.2 Instrument Description & Measurement Scale

Data were collected using a standardized questionnaire divided into two main dimensions: Mental Health (12 items) and School Adjustment (7 items), totaling 19 statements. Responses were gathered using a 3-point Likert scale as detailed in Table 1.

Table 1: Three-Point Likert Scale Scoring

Response Option	Disagree	Neutral	Agree
Assigned Weight	1	2	3

6.3 Statistical Analysis Methods

Data processing was executed using SPSS Version 26. Statistical techniques included descriptive statistics (means, standard deviations), Cronbach's alpha for scale reliability, Pearson correlation coefficients for internal consistency and hypothesis testing, Independent Samples T-Test, One-Way Analysis of Variance (ANOVA), and the Kolmogorov-Smirnov test for normality assessment.

6.4 Sample Characteristics

The study targeted fourth-year middle school students. A simple random sampling method yielded 80 fully completed, valid questionnaires.

Table 2: Sample Distribution by Gender

Gender	Frequency	Percentage (%)
Male	41	51.2%
Female	39	48.8%
Total	80	100.0%

Table 3: Sample Distribution by Age

Age Category	Frequency	Percentage (%)
Under 15 Years	13	16.3%

Age Category	Frequency	Percentage (%)
15 Years and Older	67	83.8%
Total	80	100.0%

7. Reliability and Validity

7.1 Scale Reliability

Reliability was established using Cronbach's Alpha coefficient across all 19 scale items.

Table 4: Cronbach's Alpha Reliability Analysis

Scale Dimension	Number of Items	Cronbach's Alpha Value
All Questionnaire Items	19	0.781

The overall Cronbach's Alpha coefficient reached 0.781, demonstrating robust internal consistency and acceptable scientific reliability for field application.

7.2 Internal Consistency Validity

Pearson correlation coefficients were calculated to verify item-total construct validity.

Table 5: Pearson Correlation Coefficients for Scale Items

Dimension	Item No.	Correlation Coefficient (r)	Significance Level (Sig.)
Mental Health	01	0.852**	0.000
	02	0.845**	0.000

Dimension	Item No.	Correlation Coefficient (r)	Significance Level (Sig.)
	03	0.912**	0.000
	04	0.699**	0.000
	05	0.871**	0.000
	06	0.758**	0.000
	07	0.923**	0.000
	08	0.651**	0.000
	09	0.712**	0.000
	10	0.981**	0.000
	11	0.851**	0.000
	12	0.751**	0.000
School Adjustment	13	0.891**	0.000
	14	0.569**	0.000
	15	0.685**	0.000
	16	0.789**	0.000

Dimension	Item No.	Correlation Coefficient (r)	Significance Level (Sig.)
	17	0.892**	0.000
	18	0.871**	0.000
	19	0.781**	0.000

** Significant at the 0.01 level ($p < 0.01$).

All items displayed statistically significant correlation coefficients ($p < 0.001$), establishing robust construct validity.

7.3 Normality Test

To confirm data suitability for parametric analysis, the Kolmogorov-Smirnov test was performed.

Table 6: Kolmogorov-Smirnov Test for Normality

Variable	Test Statistic	Degrees of Freedom (df)	Significance Level (Sig.)
All Questionnaire Items	0.789	19	0.000

The statistical significance value confirmed that data distribution adheres sufficiently to normality, justifying parametric tests.

8. Presentation and Discussion of Results

8.1 Testing Hypothesis 1

Hypothesis 1 states: "There is a statistically significant relationship between mental health and school adjustment among fourth-year middle school students."

Table 7: Pearson Correlation Between Mental Health and School Adjustment

Variables	Pearson Correlation (r)	Significance Level (Sig.)
Mental Health & School Adjustment	0.920**	0.000

The statistical analysis yielded a Pearson correlation coefficient of $r = 0.920$ with a significance value of $p = 0.000$ (< 0.05). This indicates an exceptionally strong positive correlation: higher levels of psychological well-being directly correlate with enhanced school adjustment. Mental health enables students to handle academic pressures, maintain harmonious peer relationships, and integrate into institutional routines. This strong correlation aligns with developmental literature highlighting emotional stability as a prerequisite for educational success during adolescence.

8.2 Testing Hypothesis 2

Hypothesis 2 states: "There are statistically significant differences in mental health and school adjustment attributable to the gender variable."

Table 8: Inferential Test Results for Gender Differences

Variable	Calculated T-value	Tabular T-value	Degrees of Freedom (df)	Significance Level (Sig.)
Mental Health	5.078	2.047	78	0.019

The calculated T-value (5.078) exceeded the tabular threshold (2.047), with ANOVA confirmation yielding $F = 5.708$ ($p = 0.019 < 0.05$). These results confirm significant gender differences favoring females. This outcome can be attributed to faster emotional and social maturation in early adolescent females, enhanced emotional expression, and stronger social support seeking behaviors, whereas adolescent males may experience heightened emotional externalization or coping difficulties under academic pressure.

8.3 Testing Hypothesis 3

Hypothesis 3 states: "The level of mental health among fourth-year middle school students is moderate."

Table 9: Categorical Ranges for Mental Health Assessment

Score Range	19 – 28	29 – 38	39 – 47

Score Range	19 – 28	29 – 38	39 – 47
Assigned Level	Low	Moderate	High

The sample's mean mental health score was 29.4, placing it firmly within the 29–38 range corresponding to a moderate level of psychological well-being. This reflects a state of relative emotional equilibrium, where students maintain basic psychological functionality despite facing stress associated with the pivotal fourth-year official examinations and transitional adolescent changes.

9. General Conclusion

This empirical study confirms that mental health and school adjustment are deeply interdependent factors influencing student success. Fourth-year middle school students exhibit moderate mental health levels, and positive mental health directly drives academic adaptation. Significant gender differences favoring females highlight the necessity of gender-responsive psychological support in school settings.

10. Recommendations and Suggestions

- ☐ Establish dedicated school counseling centers staffed by qualified psychological professionals to provide early diagnostic and therapeutic support.
- ☐ Foster healthy educational environments by promoting stress-reduction workshops, anxiety management programs, and positive teacher-student communication.
- ☐ Integrate non-formal extracurricular activities to enhance peer bonding, self-expression, and institutional belonging.
- ☐ Enhance school-family collaboration to ensure continuous emotional monitoring and support during critical examination phases.
- ☐ Conduct further large-scale, longitudinal research exploring additional socioeconomic and environmental determinants of student mental health.

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Appendix 01: Research Survey Questionnaire

Instructions: Please indicate your level of agreement with each statement by placing a checkmark in the appropriate column.

Table 10: Questionnaire Items for Mental Health and School Adjustment

Dimension	Item No.	Statement Item	Agree	Neutral	Disagree
Mental Health	1	I feel psychologically comfortable while I am at school.			
	2	I deal with daily pressures easily.			
	3	I am usually in a good mood during the school day.			
	4	I can control feelings of anger or stress.			
	5	I feel optimistic about my academic future.			
	6	I sleep well and wake up feeling rested.			
	7	I enjoy school and extracurricular activities.			
	8	I find emotional support from my family and friends.			
	9	I do not suffer from excessive anxiety about my studies.			

Dimension	Item No.	Statement Item	Agree	Neutral	Disagree
	10	I can express my feelings easily.			
	11	I see myself as capable of overcoming difficulties.			
	12	I feel self-confident in my interactions with others.			
School Adjustment	13	I feel comfortable in my relationships with my classmates.			
	14	I am keen to respect school rules.			
	15	I regularly participate in classroom and group activities.			
	16	I can easily adapt to teachers and their feedback.			
	17	I feel a sense of belonging to my school.			
	18	I am committed to completing my homework on time.			
	19	I deal positively with various school challenges.			

