

RESEARCH ARTICLE

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Psychological Harmony among Pre-school Students (A Field Study on a Sample of Pre-school Section Children in El-Oued Municipality)

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Abstract:

This study aimed to uncover the level of psychological compatibility among pre-school students. The study employed data collection tools supported by a descriptive methodology. The sample consisted of 31 male and female students from the preparatory year. Results, following data analysis and interpretation, revealed that the differences in psychological compatibility levels among preparatory year students are statistically significant. The majority of preparatory year students exhibit a high level of psychological compatibility, with no statistically significant differences between males and females in psychological compatibility within the preparatory year section. On the compatibility scale, convergence in psychological compatibility between males and females was recorded.

Keywords: Psychological Compatibility; Preparatory Year; Students.

1- Introduction:

Pre-school education is considered a stage of integrating the child into a learning phase beyond the family environment. It is a phase within the educational system aimed at remedying or compensating for family deficiencies and preparing children for entry into the world of school and compulsory education. This stage provides various and integrated activities, necessitating psychological compatibility, which holds significant importance in various life domains, especially in the educational and academic fields. Numerous studies have focused on understanding and interpreting learner behavior, as well as developing strategies and solutions to ensure the psychological well-being of the learning child. Because psychological compatibility is an indicator of the learner child's good mental health, it represents human behavior and the various relationships between the child and oneself, the child and their family, the child and peers, and the child and their school. The psychological compatibility of the learning child affects their educational and academic trajectory through their interaction with educational and school environmental elements. The time the child spends in the preparatory section is where they learn, acquire skills, and gain knowledge that illuminates their intellectual thought.

Psychological incompatibility manifests itself in pre-school students through poor relationships with oneself, child's family, and the school. Its effects become evident in certain behaviors such as violence, withdrawal, disturbance of peers, continuous absence, leading to a decline in the child's educational and academic performance. Therefore, it is crucial to consider the psychological conditions of the child and take into account the demands of their growth.

Hence, in this study, we seek to highlight the importance of psychological compatibility among a sample of preparatory year students.

1-1- The Problem Statement:

The child goes through various developmental stages, the first of which is the childhood stage, considered the most important stage of life for humans from birth to adolescence. This stage is distinct

and has its own behavioral and educational goals, preparing the child to face cultural challenges imposed by the inevitability of progress in all life domains.

Many thinkers and educators, such as Friedrich Froebel and others, have advocated for attention to the education of children in the pre-school age. There has been a profound focus on the early stages of a child's life to understand their experiences, skills, thinking methods, actions, and social relationships. The world's countries have taken the advice of these thinkers and educators, opening preparatory sections to care for and prepare children to acquire these cognitive and educational skills through various activities. In these activities, children can express their desires and form a positive concept of themselves.

Psychologists emphasized the importance of a child's relationships with their education and educational environment and how they are influenced by their psychological compatibility. Psychological compatibility is considered one of the fundamental and essential concepts in psychology and mental health. Psychologists and mental health professionals have made it a significant subject of study. The exploration of the concept of compatibility or maladjustment is not limited to mental health alone. In all areas of life studied by psychology, we can view them from the perspective of compatibility or lack thereof (Hisham Mohamed El Kholy, 2002, p. 233).

The process of psychological compatibility is a relative process in which material, social, and psychological elements must be present. It is sometimes imposed on the child by virtue of their upbringing on how to achieve compatibility. Psychological compatibility refers to the individual's degree of balance and their harmony with the conditions of the material and social environment. It also indicates their ability to face conflicts arising within themselves due to the pressures of this environment and the extent of their liberation from anxiety or the reduction of tension resulting from it (Abdelmotaleb Al Qureity, 2001, p. 20).

Psychological compatibility can indeed influence the academic journey of a child through their interaction and engagement with educational elements in the school environment. Based on this perspective, this study aims to understand the psychological compatibility of preparatory year students through the following questions:

1-2- Study Questions:

A. General Question:

- What is the level of psychological compatibility among preparatory year students?

B. Sub-question:

- Are there statistically significant differences in psychological compatibility among preparatory year students attributed to the gender variable?

1-3- Study Hypotheses:

A. General Hypothesis:

- We expect that the psychological compatibility among preparatory year students is high.

B. Specific Hypothesis:

- There are no statistically significant differences in psychological compatibility among preparatory year students attributed to the gender variable.

1-4- Reasons for Choosing the Topic:

There are several reasons that led us to choose and address this topic as the initial step in building the research. Some of these reasons include:

A. Personal Reasons:

- Understanding the methods used in pre-school education.
- Attempting to identify the interests of children through preparatory education.
- Understanding the concept of preparatory education and its role.

- Seeking to comprehend the role of preparatory education in preparing children for school.
- Personal interest in the childhood age group.
- Desire to contribute to scientific and field research and gain experience in conducting it.

B. Objective Reasons:

- Considering pre-school education as a social and educational institution deserving of study.
- The significant status that preparatory education currently holds.
- Understanding the psychological compatibility achieved by preparatory education for children in the early years.

1-5- Significance of the Study:

The study derives its importance from the significance of the topic itself, namely the psychological compatibility of pre-school students and its effective role in the mental well-being of children, shaping their upbringing within society, and what they receive in this stage before entering the school, which marks the opening of their cognitive world.

The importance of the pre-school education lies in it being the developmental and psychological stage in forming the future personality of the child. This study emphasizes the significance of psychological compatibility among pre-school students in relation to the educational environment, enabling them to acquire positive behaviors free from conflicts, self-regulation, and the ability to express thoughts and feelings. It also promotes love and respect for others, a sense of tranquility, and self-confidence.

Moreover, our study belongs to evaluative educational research in psychology, a type of research that is important as it seeks to answer questions that educational institutions are concerned about by developing and enhancing specific programs or evaluating the effectiveness of certain educational methods.

1-6- Study Objectives:

Our study aims to shed light on preparatory year students and their level of psychological compatibility, investigating whether there are differences in the sample concerning gender.

2- Operational Definitions of Study Concepts:

- **Psychological Compatibility:** The extent to which an individual possesses the ability to self-regulate, tolerate criticism and frustration, control anxiety, feel secure and at ease away from fear and tension, and adapt to a new environment.
- **Pre-school Students:** Children aged (5-6) who have enrolled in the preparatory year section.
- **Pre-school phase:** The section that includes children aged (5-6).

2-1- Concept of Psychological Compatibility:

Compatibility is one of the most common concepts in psychology, and its definitions have varied in dictionaries, encyclopedias, and, in general, they are socio-psychological. These definitions do not focus on the behavior of the individual himself or on the assessment of human behavior. Instead, they revolve around how to achieve a balance between the individual and their environment, the context in which they live. The term compatibility has been used with various meanings, such as adaptation in the field of biology or compatibility in the field of mental or psychological health.

2-2- Definition of Compatibility:

In language, compatibility means "something that agrees with, matches, and is in harmony with it" (Ibn Manzur, Lisan al-Arab dictionary).

In philosophy, compatibility is "following the path of the community and avoiding any deviation in character and behavior" (according to "Aristotle"). According to "Eysenck,"

compatibility is a state of balance in satisfying individual needs according to environmental requirements (Hussein Asmaa, 2002, p. 37).

- Definition by Carl Rogers: "Compatibility is the ability of a person to accept things as perceived, including oneself, and then work to organize them subsequently" (Al-Gaddafi, 1998, p. 110).
- Definition by Nabil Sufian: Nabil Sufian defines compatibility as "the individual's satisfaction of his psychological needs and acceptance of himself, enjoying a life free of stress, conflict, and psychological disturbances, and enjoying intimate social relationships, the ability to participate in social activities, and acceptance of the customs and values of society" (Sufian, 2004, p. 153).
- Definition by Mustafa Fahmi: Mustafa Fahmi defines compatibility as "a continuous process with the aim of leading the individual to change his behavior, to create a more compatible relationship between him and the environment. Based on this, we can define this phenomenon as the ability to form satisfactory relationships between a person and his environment" (Ali, 2004, p. 562).

3- Method of Research:

To achieve the objectives of the study, every researcher must rely on a methodology regardless of its type, as it is the fundamental support for every scientific research, especially in the field of social research. Given that the current study aims to determine the level of psychological compatibility among preparatory year students, the exploratory descriptive methodology is suitable and appropriate for this study. This methodology provides us with all the data that control our study and facilitates the situations to reach the problem on which the study is based (psychological compatibility among preparatory year students).

4- Study Tools:

The tools and methods of scientific research vary from one study to another, ranging from measuring devices to examination tools to testing procedures to survey forms, and so on.

In this study, we constructed a questionnaire for psychological compatibility and applied it to a sample of preparatory year students, ensuring its validity. To gather more information about the research topic, we posed some questions to a group of preparatory year students, totaling 31 students.

The questionnaire consists of 40 items, each having three alternatives:

1. Always.
2. Sometimes.
3. Never.

Table (01): Significance of the difference between the levels of psychological adjustment among students of the preschool education.

Levels of psychological adjustment	t	%	Ka2 Value	df	P-value	Statistical significance
Low psychological compatibility	11	35	7.03	2	0.03	Function
Moderate psychological compatibility	4	13				
High psychological compatibility	16	52				
Total	31	100				

The data presented in Table 01 illustrates that the number of students with a low level of psychological compatibility is estimated at 11 students, constituting 35%, while the number of students with a moderate level of psychological compatibility is 4 students, accounting for 13%. Moreover, the number of students with a high level of psychological compatibility is assessed at 16

students, representing 52%. This implies a significant variance in the levels of psychological compatibility among the pre-school class students.

Table (02): Significance of the differences between the average males and females of the preparatory section students on the psychological compatibility scale.

Psychological Compatibility Scale	Sample H	Arithmetic mean \bar{X}	Standard deviation S	Average spreads	TC value	P-value	Statistical significance
Male	12	89.50	6.99	1.39	0.50	0.62	Non D
Females	19	90.89	7.94				

The questionnaire was applied to a sample of 31 male and female students in order to extract its psychometric properties.

Reliability:

To reassess the reliability of the psychological compatibility scale on a sample of (31) preparatory class students, the Cronbach's Alpha method was employed. This is because Cronbach's Alpha is suitable for measures with three or more items with weights. The coefficient was calculated as shown in Table (03).

Table (03): Coefficient of consistency alpha Cronbach for the psychological compatibility scale among students of the preparatory section.

Scale	Alpha Cronbach coefficient	Number of items
Psychological adjustment	0.70	40

The values of the reliability coefficients using Cronbach's Alpha method to measure the consistency of items in the psychological compatibility scale among preparatory class students are evident in Table (03). It is observed that the reliability coefficient estimated at (0.70) is acceptable for reliability in collecting study data.

5. Study Sample:

The study sample comprised 31 male and female students from the preschool class at the Miassy Abdelwahed School in Al-Wadi. The subsequent table illustrates the characteristics of the study sample.

Table (04): Significance of the differences between the average males and females of the pre-school section students on the psychological compatibility scale.

Psychological Compatibility Scale	Sample H	Arithmetic mean \bar{X}	Standard deviation S	Average spreads	TC value	P-value	Statistical significance
Male	12	89.50	6.99	1.39	0.50	0.62	Non D
Females	19	90.89	7.94				

Through Table (04), the sample consists of 31 male and female students, with a higher percentage of females compared to males. The number of females is 19 students, accounting for 90.89%, while the number of males is 12 students, representing 89.50%.

6- Statistical Methods Used in the Study:

The study data were entered into the sample using the Statistical Package for the Social Sciences (SPSS) software, known for its capabilities in performing statistical analyses to answer the study's questions based on the study variables.

6-1- Recognizing the statistical distribution characteristics of the study sample grades, we will explore the following:

- Frequencies and percentages.
- Mean and standard deviation.
- Frequency multiples.

6-2- Inferential Statistics:

- Chi-square test (χ^2).
- "T" Test.

6-3- Calculation of Cronbach's Alpha Coefficient for Stability.

7- Presentation and Analysis of Study Results:

7-1- Presentation and Analysis of the First Hypothesis: The majority of preparatory year students exhibit a high level of psychological compatibility.

To verify this hypothesis, we conducted the Chi-square (χ^2) non-parametric test for goodness of fit. After confirming the assumptions and conditions of the Chi-square test, the results were as follows:

Table (05): Significance of the difference between the levels of psychological adjustment among students of the pre-school section.

Levels of psychological adjustment	t	%	Ka ² value	Push	P-value	Statistical significance
Low psychological compatibility	11	35	7.03	2	0.03	Function
Moderate psychological compatibility	4	13				
High psychological compatibility	16	52				
Total	31	100				

$$\chi^2_{(df2, \alpha=0.05)} = 5.99$$

From Table 05, it is evident that there is a statistically significant difference between the levels of psychological compatibility among pre-school students. This is indicated by the calculated Chi-square (χ^2) value, estimated at 7.03, being greater than the tabulated Chi-square value of 5.99. in addition, with a probability value of 0.03 smaller than the significance level (α), the existing

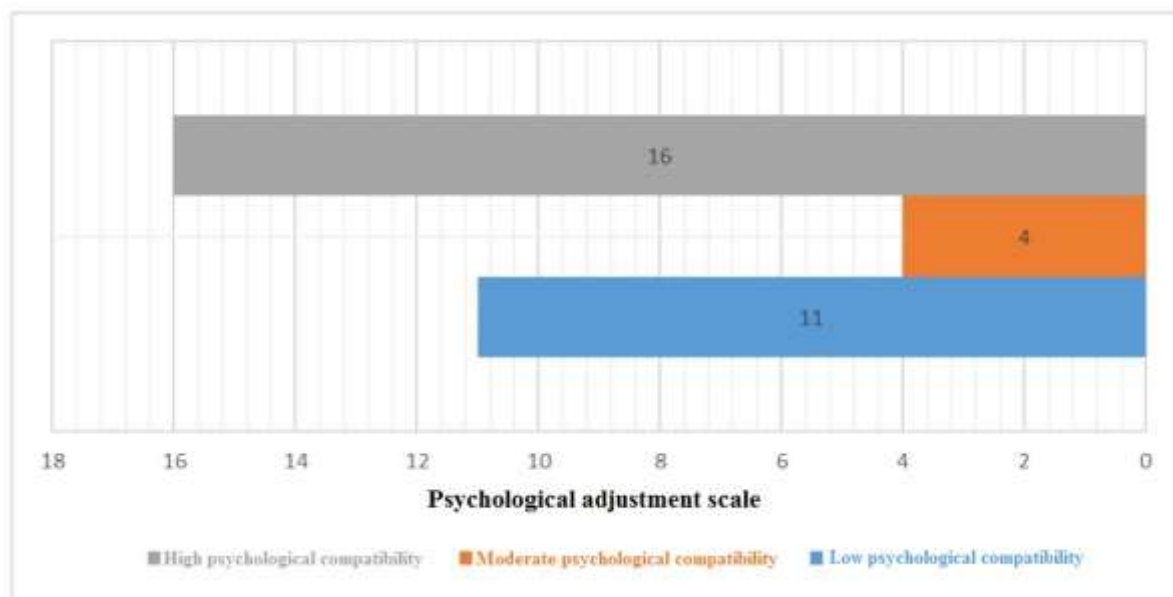
difference between the levels of psychological compatibility among preparatory year students is considered real.

For clarification, the frequency of pre-school students with a high level of psychological compatibility is 16, constituting 52%, which is the highest percentage. On the other hand, the frequency of students with a low level of psychological compatibility is 11, representing 35%, a significant proportion. Meanwhile, the frequency of students with a moderate level of psychological compatibility is 4, accounting for 13%.

This result leads us to accept the first hypothesis, stating that the majority of preparatory year students exhibit a high level of psychological compatibility.

The following figure presents graphically the levels of psychological compatibility among the pre-school class students."

Figure (01): Levels of Psychological Compatibility among Preparatory Class Students.



It is evident from Figure (01) that the frequency of preparatory class students with a high level of psychological compatibility is estimated at 16, which is the highest. Following that, there is the frequency of students with a low level of psychological compatibility estimated at 11. Then, the frequency of students with a moderate level of psychological compatibility estimated at 4.

7-2- Presentation and Analysis of the Results of the Second Hypothesis:

There are no statistically significant differences at the significance level (α) between males and females of preparatory class students on the psychological compatibility scale.

To verify the validity of this hypothesis, we conducted an independent samples t-test. After confirming the assumptions and conditions of the t-test, the following table illustrates the test results and statistical significance:

Table (06): Significance of the differences between the average males and females of the pre-school section students on the psychological compatibility scale.

Psychological Compatibility Scale	Sample n	Arithmetic mean \bar{X}	Standard deviation S	Average spreads	TC value	P-value	Statistical significance
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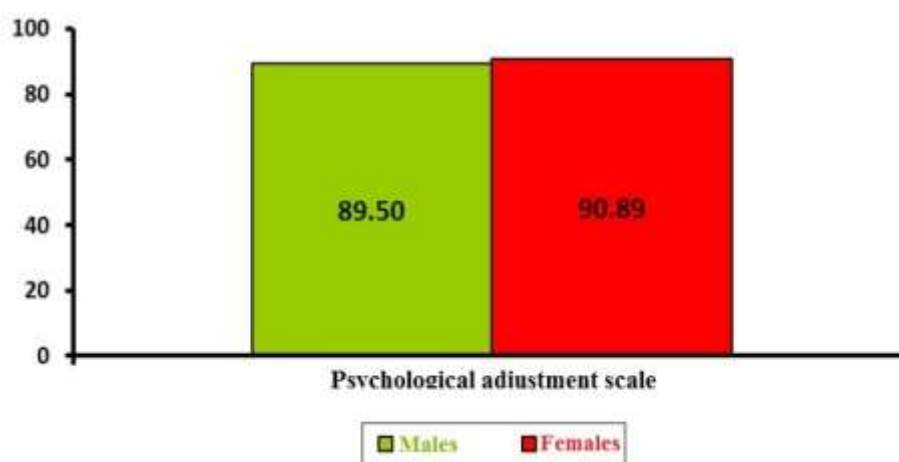
Male	12	89.50	6.99	1.39	0.50	0.62	Non D
Females	19	90.89	7.94				

$$t_{t(df29,\alpha\leq0.05)} = 2.04$$

"The data in Table (06) reveals that the average scores for males in the preparatory class on the psychological compatibility scale are (89.5) with a standard deviation of (6.99). The average scores for females in the preparatory class on the psychological compatibility scale are (90.89) with a standard deviation of (7.94). The result of the t-test (0.50) is less than the tabulated t-value (2.04), with a calculated probability value of (0.62), which is greater than the significance level (α). This indicates that the gender difference (males/females) does not lead to variation in the scores of the psychological compatibility measure among preparatory class students. This result leads us to accept the second hypothesis stating that there are no statistically significant differences at the significance level (α) between males and females among preparatory class students on the psychological compatibility scale.

The following figure illustrates the average scores for males and females in the preschool class on the psychological compatibility scale.

The Figure (02): Average Scores for Males and Females of Pre-school Class Students on the Psychological Compatibility Scale.



The Figure (02): It is evident that the average scores for females of Pre-school Class students on the Psychological Compatibility Scale (90.89) are somewhat close to the average scores for males (89.5).

8- Statistical Methods Used to Address the Study Hypotheses:

The researcher employs statistical methods to analyze the studied phenomenon and reach data and results. We utilized the Statistical Package for the Social Sciences (SPSS) for encoding and inputting the data into the computer. The data were then processed using the following descriptive and graphical statistical methods:

8-1- Descriptive and graphical statistics:

- Frequencies and percentages.
- Mean and standard deviation.
- Box plots.

8-2- Inferential Statistics:

- Chi-square test (χ^2) for detecting the significance of differences between the levels of psychological compatibility among kindergarten students.

- Independent samples t-test for assessing the significance of differences between male and female kindergarten students on the psychological compatibility scale.

9- Psychometric Study of the Study Tool:

In the current study, we conducted a psychometric analysis of the psychological compatibility scale on a sample estimated at (30) kindergarten students. We assessed the reliability using Cronbach's alpha, as Cronbach's alpha is suitable for scales with a Likert-type response format and beyond. The following table presents the results:

Table (07): Alpha Cronbach consistency coefficient for the psychological compatibility scale among students of the pre-school section.

Scale	Alpha Cranbach coefficient	Number of items
Psychological adjustment	0.70	40

Table (07) illustrates the stability coefficients using Cronbach's alpha to measure the consistency of items in the psychological compatibility scale among pre-school students. We observe that the estimated stability coefficient value of (0.70) is acceptable for the reliability of the data in this study.

10- Explanation and Discussion of Study Results:

10-1- Explanation and Discussion of the First Hypothesis:

Through our study, we have concluded that:

- The difference observed in the psychological compatibility levels among pre-school students is a genuine difference.
- It is evident that kindergarten students have varied levels of psychological compatibility, including the high level estimated at 16 students, constituting 52%, which is the highest. Additionally, the low level estimated at 11 students, representing 35%, is considered significant, and the moderate level estimated at 4 students is 13%.
- The majority of kindergarten students exhibit a high level of psychological compatibility.

This can be attributed to the freedom of kindergarten students from uniformity, their harmony with others in opinions and characters, and their ability to express their thoughts and feelings. This fosters a sense of tranquility, self-confidence, emotional stability free from psychological conflicts, and the ability to love and coexist with others.

10-2- Explanation and Discussion of the Second Hypothesis:

- There are no statistically significant differences in psychological compatibility between females and males among pre-school students.
- The average scores of females and males among pre-school students on the psychological compatibility scale are somewhat convergent. The psychological compatibility for females was (90.89), while for males, it was (89.5).

This can be attributed to the harmony in the level of psychological compatibility between females and males among pre-school students, as they live in the same environment with similar requirements, desires, and aspirations. This is reflected in their adherence to common customs, traditions, and laws, following shared behaviors in society.

11- Summary of Study Results and Recommendations:

Based on the statistical analysis of the data obtained through the research tools, the following findings are evident:

- There is no significant difference in the levels of psychological compatibility among pre-school students.
- The majority of pre-school students exhibit a high level of psychological compatibility.
- There are no statistically significant differences in psychological compatibility attributed to gender.
- The psychological aspect is considered crucial by psychologists and educators. The pre-primary school period is deemed particularly critical as it shapes the child's personality, leaving a lasting impact on their mind, soul, and behavior throughout their life stages.

Recommendations for fostering psychological well-being in kindergarten students include:

- Therefore, we recommend that preparatory education institutions, which play a vital role in shaping a child's healthy personality in their early stages, focus on addressing the psychological well-being. It is essential to address the gaps resulting from factors such as exposure to violence, family problems, or the absence of one or both parents due to divorce or death.
- The close collaboration between educational authorities, both official and private, and health institutions is essential. Pre-school education institutions should adopt technical methods, taking into account the insights from psychology and educational sciences. Research and studies specific to the pre-school stage should be conducted.
- Conducting studies to assess the effectiveness of programs in developing psychological compatibility among preparatory year students.
- Establishing a listening unit tasked with addressing issues that hinder high psychological compatibility in students and providing solutions for enhancing their psychological well-being.
- Establishing a strong connection between the student and their educational environment by fostering a positive relationship. This involves cultivating a student who is psychologically compatible and has a high self-esteem."

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