

**The Relationship Between Self-Esteem and Psychological Stress  
Among Fourth-Year Middle School Students.  
A study field at the Scholar Abdul Hamid Ben Badis Middle school-  
Municipality of El Oued-**

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**Abstract:** An individual is the fundamental building block of any society. A self-adjusted individual is a source of renaissance and intellectual advancement. Therefore, it is incumbent upon this human being to have a sound and positive thinking about oneself and one's community where self-esteem is considered to be the foundation of the personality. However, the individual's pursuit of life and mental well being is hindered by various pressures that impact and alter the course of one's life Especially noteworthy are the psychological pressures that have recently occupied a significant space in psychological research, particularly those faced by individuals in a sensitive stage, namely adolescence, due to the physiological and biological changes they undergo.

Emerging from these foundational premises, it becomes evident that the subject of self-esteem and psychological stress is of significant importance during this developmental stage, which coincides with middle school education. The objective of our study is to explore the correlation between self-esteem and psychological stress among students in their fourth year of middle school. This will be achieved by addressing the following research question: Is there a correlation between self-esteem and psychological stress among fourth-year middle school students?

**Keywords:** Self-Esteem, Psychological Stress, Fourth-Year Middle School Students.

**Research Problem** Our society today is experiencing numerous changes at the familial, educational, professional levels, among others. Alongside to many technological advancements. These changes contribute to the complexity and difficulty of life, leading to the emergence of numerous challenges and difficulties that cause a great deal of psychological distress. This distress can cause an individual to struggle with self-acceptance at all stages of life. However, these psychological troubles have a significant impact on a particularly sensitive segment of society, namely teenagers. The adolescent stage is considered one of the fundamental stages that an individual goes through in their life. The physiological changes that occur during this stage cause mood swings in the adolescent's personality.( Ben Salah, 2015, p. 87)

Given that, this period coincides with the middle stage of general education, students at this stage are more targeted by psychological problems compared to their counterparts in other stages. Consequently, this negatively affects their life course and cultivates negative feelings in them, which in turn impacts their self-esteem.

For this reason, the concept of self-esteem has garnered significant attention from Arab researchers. Carl Rogers addressed it within his theory (the client-centered theory), after which it began to gain prominence among other psychological concepts (Mahmoud,ShuaibAli,1988,p.136)

It is evident from the foregoing that students are stressed by factors which impact their mental well-being, diminish their capabilities and negatively impact their self-esteem. Reviewing previous studies reveals several important variables that affect and are affected by self-esteem, notably the variable of psychological pressure.

Psychological stress is defined as a state of intense psychological tension that occurs due to external factors that exert pressure on the individual, creating a state of imbalance and behavioral disturbance.(Batus, 2005, p. 104)

The research objective of the current study lies in identifying the type of correlational relationship between self-esteem and psychological stress among fourth-year middle school students. This can be achieved by answering the following

- Is there a correlational relationship between self-esteem and psychological stress among the study sample?
- Are there statistically significant differences in self-esteem among the study sample according to the variable of gender?
- Are there statistically significant differences in psychological stress among the study sample according to the variable of gender?

## **2\_StudyHypotheses:**

Through the study's inquiries, the hypotheses are as follows:

RH1: There is an inverse correlational relationship between self-esteem and psychological stress among fourth-year middle school students.

RH2: There are statistically significant differences in self-esteem among fourth-year middle school students according to the variable of gender.

RH3: There are statistically significant differences in psychological stress among fourth-year middle school students according to the variable of gender.

## **3\_ Significance of the Study:**

The study sheds more light and attention on the topic of self-esteem and its relationship with psychological stress among fourth-year middle school students. The study is conducted on an important group and a critical stage of human life, which is adolescence, and its role in society.

## **4\_ The Study Objectives :**

- To assess the level of self-esteem among fourth-year middle school students.
- To determine the level of psychological stress among fourth-year middle school students.

- To identify the nature of the relationship between self-esteem and psychological stress among fourth-year middle school students.

### **5- The Study Limits:**

The current study is defined:

- Temporally: The study was conducted during the 2022-2023 academic year.
- Spatially: At the middle school of the scholar Abdelhamid Ben Badis in the state of El Oued.
- population: 130 male and female students from the fourth-year middle school classes of the middle school.

### **6\_ Procedural Definition of Basic Concepts:**

#### **Self-esteem:**

As defined by Cooper smith (1967), self-esteem is the reflection of a set of attitudes and beliefs that an individual holds about themselves when confronted with the surrounding world regarding expectations of success and failure, acceptance, and personal strength. This is evident through the degree to which the student scores on Coopersmith's self-esteem scale in all its various dimensions.

#### **Psychological stress:**

It is a state of tension, distress, anxiety, and imbalance experienced by fourth-year middle school students during their academic journey when their demands and needs do not align with the environmental demands and situations surrounding them. This is measured through the use of the Weinstein Psychological Stress Scale, which is specifically designed for this purpose.

#### **Research Methodology:**

The aim of this study is to understand the nature of the relationship between its variables (self-esteem and psychological stress). The descriptive method is the most suitable approach for this study, as it allows for a comparison of the fundamental study

variables (self-esteem and psychological stress) among the sample population (fourth-year middle school students) and the mediating variables represented by gender and the level of psychological stress

### 1-The Study Population:

The study population comprises all male and female students in the fourth-year middle school classes at Abdelhamid Ben Badis Middle School in the municipality of El Oued. The following table illustrates the distribution of individuals in the original population according to gender.

Table 1

*Characteristics of the Study Population by Gender.*

| Gender  | Number | Percentage |
|---------|--------|------------|
| Females | 177    | 56.15%     |
| males   | 139    | 43.85%     |
| Total   | 316    | 100%       |

From Table 1, it is evident that the study population consists of 316 students, including 139 males, accounting for 43.85%, and 177 females, accounting for 56.15%.

### 2- Validity of Study Instruments:

#### 4-1- Weinstein Psychological Stress Scale:

This scale, designed by Weinstein and others in 1993, measures stress indicators. It comprises 30 statements, distinguishing between two types of items: direct and indirect.

#### Validity scale:

The validity coefficient was calculated using the internal consistency method. Correlations were computed between the items of the scale and the scores of its dimensions, as well as among the items themselves, and between the dimensions and the total score of the scale using Pearson correlation coefficient.

Table 2

*Item-to-Total Correlations for the Psychological Stress Scale*

| Item Number | Correlation Coefficient | Significance Level |
|-------------|-------------------------|--------------------|
| 1           | 0.27                    | 0.05               |
| 2           | 0.32                    | 0.01               |
| 3           | 0.28                    | 0.05               |
| 4           | 0.48                    | 0.01               |
| 5           | 0.35                    | 0.01               |
| 6           | 0.19                    | 0.05               |
| 7           | 0.35                    | 0.01               |
| 8           | 0.37                    | 0.01               |
| 9           | 0.42                    | 0.01               |
| 10          | 0.51                    | 0.01               |
| 11          | 0.58                    | 0.01               |
| 12          | 0.36                    | 0.05               |
| 13          | 0.25                    | 0.05               |
| 14          | 0.46                    | 0.01               |
| 15          | 0.28                    | 0.05               |
| 16          | 0.44                    | 0.01               |
| 17          | 0.47                    | 0.01               |
| 18          | 0.34                    | 0.05               |
| 19          | 0.28                    | 0.05               |
| 20          | 0.51                    | 0.01               |
| 21          | 0.55                    | 0.01               |
| 22          | 0.47                    | 0.01               |
| 23          | 0.59                    | 0.01               |
| 24          | 0.57                    | 0.01               |
| 25          | 0.46                    | 0.05               |
| 26          | 0.47                    | 0.01               |

|    |      |      |
|----|------|------|
| 27 | 0.34 | 0.05 |
| 28 | 0.47 | 0.01 |
| 29 | 0.34 | 0.05 |
| 30 | 0.28 | 0.05 |

From Table 2, it is evident that the correlation coefficients between the items comprising the scale and its total score are statistically significant, ranging between 0.19 and 0.59. Most of these values are significant at the 0.01 level, while others are significant at the 0.05 level.

#### 4-1-1. Reliability scale:

There are several methods for assessing reliability. However, in our current study, we calculated the test reliability coefficients using the split-half method with Guttman's equation, as well as internal consistency using Cronbach's alpha. The results are presented as follows:

Table 3

#### *Reliability Coefficients Using Internal Consistency and Guttman's Split-Half Method*

| Cronbach's Alpha ( $\alpha$ ) | Guttman's Split-Half |
|-------------------------------|----------------------|
| 0.76                          | 0.83                 |

From the preceding table, it is evident that the Cronbach's alpha coefficient is estimated at 0.76, while the split-half reliability using Guttman's equation is 0.83. Therefore, we can conclude that the scale exhibits high levels of reliability.

#### 4-2. Self-Esteem Scale:

The Coopersmith Self-Esteem Scale, developed by Coopersmith in 1967, consists of 58 items that describe individual feelings and opinions. Respondents indicate their agreement with scale statements by marking either "Applies" or "Does not apply".

##### 4-2-1. Validity Scale:

In our current study, the reliability coefficient was calculated using the Internal Consistency method. The following table presents the item-to-total correlations for the dimension to which they belong (General Self-Esteem)

Table 4

*Item-to-Total Correlations for the General Self-Esteem Dimension*

| Significance Level | Item-to-Dimension Correlation Coefficient | Item Number |
|--------------------|-------------------------------------------|-------------|
| 0.01               | 0.64                                      | 01          |
| 0.01               | 0.65                                      | 03          |
| 0.01               | 0.62                                      | 04          |
| 0.01               | 0.41                                      | 07          |
| 0.01               | 0.41                                      | 10          |
| 0.01               | 0.86                                      | 13          |
| 0.01               | 0.62                                      | 12          |
| 0.01               | 0.64                                      | 18          |
| 0.01               | 0.62                                      | 19          |
| 0.01               | 0.41                                      | 15          |
| 0.01               | 0.41                                      | 24          |
| 0.01               | 0.86                                      | 25          |
| 0.01               | 0.63                                      | 27          |
| 0.01               | 0.65                                      | 30          |
| 0.01               | 0.31                                      | 34          |
| 0.01               | 0.60                                      | 31          |
| 0.01               | 0.60                                      | 35          |
| 0.01               | 0.31                                      | 38          |
| 0.01               | 0.41                                      | 39          |
| 0.01               | 0.41                                      | 43          |
| 0.01               | 0.86                                      | 48          |
| 0.01               | 0.63                                      | 47          |
| 0.01               | 0.65                                      | 51          |

|      |      |    |
|------|------|----|
| 0.01 | 0.41 | 55 |
| 0.01 | 0.60 | 56 |
| 0.01 | 0.60 | 57 |

From Table 4, it is evident that the correlation coefficients between the items of the dimensions constituting the scale and the total score of the dimension it belongs to (General Self-esteem) are statistically significant, ranging between (0.31 and 0.86). Most of these values are significant at the 0.01 level, while others are significant at the 0.05 level.

#### 4-1-1- Reliability Scale:

In our current study, we extracted test reliability coefficients using the split-half method with Guttman's equation, as well as internal consistency using Cronbach's alpha. The following presentation summarizes the results:

Table 5

*Reliability Coefficients using Cronbach's  $\alpha$  and Guttman's split-half method*

| Cronbach's Alpha ( $\alpha$ ) | Guttman's Split-Half |
|-------------------------------|----------------------|
| 0.84                          | 0.82                 |

The preceding table indicates that the Cronbach's alpha coefficient is estimated at 0.82, while the split-half reliability using Guttman's equation is 0.84. Therefore, we can conclude that the scale demonstrates high levels of reliability.

#### 5-2- Study Sample and Characteristics:

We selected the study sample from the mentioned population using a stratified random sampling method. This method was deemed appropriate because it encompasses all strata of the original population. The sample size consisted of 130 male and female students, representing 41.16% of the original population. The subsequent table illustrates the distribution of individuals within the sample based on gender:

Table 6

*Characteristics of the Study Sample by Gender*

| Gender  | Number | Percentage |
|---------|--------|------------|
| Females | 73     | 56.15%     |
| Males   | 57     | 43.85%     |
| Total   | 130    | 100%       |

From Table 6, it is evident that the study sample comprises 130 male and female students, with 57 males (43.85%) and 73 females (56.15%).

**3- Presentation and discussion of the first hypothesis results:**

In order to address the first hypothesis of the research, which states that there is a negative correlation between self-esteem and psychological stress in the study sample, we applied Pearson's correlation coefficient and obtained the results shown in the table.

Table 7

*Value and significance of the relationship between self-esteem and psychological stress*

| <b>Indicators</b><br><b>Variables</b> | <b>Correlation Coefficient</b> | <b>Significance Level</b> |
|---------------------------------------|--------------------------------|---------------------------|
| <b>Self-esteem</b>                    | -0.78                          | 0.01                      |
| <b>Psychological Stress</b>           |                                |                           |

The above table shows that the correlation coefficient is estimated at -0.78, which is statistically significant at the 0.01 significance level. This confirms the first hypothesis, which states that there is a negative correlation between self-esteem and

psychological stress in the study sample.

#### 4- Presentation and discussion of the second hypothesis results:

In order to address the second hypothesis of the study, which states that “there are statistically significant differences in self-esteem in the study sample according to the gender variable”, we calculated the arithmetic mean and standard deviation for both groups and then applied the T.Test.

Table8

*Means,Standard deviation ,Value and significance of differences in self-esteem in the study sample according to the gender variable (N males=57, N females =73)*

| Indicators<br>Variables | Males |      |      | Females |      |      | T Value | Significance Level |
|-------------------------|-------|------|------|---------|------|------|---------|--------------------|
|                         | N     | M    | SD   | N       | M    | SD   |         |                    |
| Psychological stress    | 57    | 7.46 | 4.32 | 73      | 7.84 | 4.89 | -1.55   | Not Significant    |

The results shown in Table 8 indicate that the T value is estimated at -1.55, which is not statistically significant. Hence, we accept the null hypothesis stating that there are no statistically significant differences in self-esteem in the study sample according to the gender variable, meaning that self-esteem does not differ by gender. Therefore, we can say that the second hypothesis has not been confirmed.

#### 5\_ Presentation and discussion of the third hypothesis result:

In order to address the third hypothesis of the study, which states that “there are statistically significant differences in psychological stress in the study sample according to the gender variable”, we calculated the arithmetic mean and standard deviation for both groups and then applied the T.Test.

Table 9

*Means, standard deviation, value and significance of differences in psychological stress in the study sample according to the gender variable.(N males= 57, N females= 73)*

| Indicators<br>Variables | Males |       |      | Females |       |      | T Value | Significance Level |
|-------------------------|-------|-------|------|---------|-------|------|---------|--------------------|
|                         | N     | M     | SD   | N       | M     | SD   |         |                    |
| Self-esteem             | 57    | 29.46 | 9.32 | 73      | 35.48 | 9.66 | -1.22   | 0.05               |

The results shown in Table9, indicate that the T value is estimated at -1.22, which is statistically significant. From this, we can say that there are statistically significant differences in psychological stress in the study sample according to the gender variable. Given that the arithmetic mean is higher for females, their psychological stress is higher than that of males.

### Results and Discussion

Based on the statistical analyses of the data, which were obtained through the application of research tools, the following is apparent

- There is a reverse correlation between self-esteem and psychological stress in the study sample.
- There are no statistically significant differences in self-esteem in the study sample according to the gender variable.
- There are statistically significant differences in psychological stress in the study sample according to the gender variable, in favor of females.

### Recommendations

In light of the results we have reached in our current study, we thought it appropriate to present a number of recommendations, including:

- Promoting religious awareness through media, associations, and scientific clubs.
- Activating the guidance and counseling function for students assigned to the tasks of the school guidance counselor in middle schools in order to enable them to express their desires, reveal their interests, and activate them in the form of desirable behaviors.

### **References and Referrals**

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