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## Psychological Combustion and its Relationship to Psychological Rigidity Among Students of the Faculty of Applied Education in the State of Kuwait

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### **Abstract**

*Psychological combustion is a modern concept that has attracted the attention of researchers in the fields of psychology, mental health, and clinical medicine. Researchers have attempted to study it alongside other important topics, and perhaps the concept of psychological resilience is one of those topics. In the current study, the researcher adopted the Maslach Combustion Inventory (15 paragraphs) and the Al-Shabrawy Resilience Inventory (39 paragraphs). The psychometric properties of each were extracted and their domains were investigated using exploratory factor analysis on a sample of (230) female students from the College of Applied Education at Kuwait University. The results of the study showed that the female students do not suffer from combustion and have a high degree of psychological resilience, and that there is a statistically significant correlation between combustion and psychological resilience.*

**Keywords:** Combustion, Psychological Resilience, Female students from the College of Applied Education.

### **Introduction**

The teaching profession is a noble profession and a sacred mission, as it requires students to work tirelessly, possess special skills, and possess strong morals that stem from a sense of responsibility toward their students and the goals of society. The female student is a good role model for her students in terms of morals and academic achievement, and a pioneer on the path of knowledge and the search for truth, guiding her students toward it. Education is a sacred mission, as it is the means by which prophets, messengers, and reformers establish the spiritual foundation of society. Some studies in the United States have shown that 580,000 teachers of both genders enter classrooms each year at all educational levels. However, most of these female students fall prey to feelings of failure in their first year of education, leading many of them to drop out of university and pursue other careers due to feelings of stress, dissatisfaction, and combustion (Swearingen, 2010: 3345).

Those interested in human health have noted the relationship between an individual's illness and previous exposure to stressful events and stressors. The focus has been on studying the relationship between perceptions of stressful events and forms of psychological and physical suffering. However, in recent years, psychological studies have begun to extend this focus to focus on variables that support the ability to cope effectively, or factors of resistance. This includes psychological or environmental variables associated with maintaining psychological

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well-being, even in the face of stressful circumstances, and which support an individual's ability to confront and overcome problems.

The 1960s and 1970s witnessed a significant expansion in the field of industrial psychology, with particular interest in studies related to the psychology of the industrial environment, the work system, and workers.

Herbert Freudenberger (1974) was the first to use the term "combustion," through his studies of the work environment and the stress responses experienced by workers in various industrial sectors. From these studies, he concluded that combustion is a complex phenomenon resulting from excessive effort and excessive energy depletion, which subsequently leads to feelings of physical and psychological exhaustion, followed by failure and stress, which leads to shutting down and the absence of appropriate behavioral responses.

**Maslach Combustion Model:** Maslach views combustion as a psychological syndrome consisting of three domains or factors: emotional depletion (loss of emotional resources), depersonalization (pessimistic attitude toward people who should receive attention and care), and personal characteristics (less success and efficiency in the work environment). Maslach C, Jackson SE, Leiter MP. *Maslach Combustion Inventory: Manual*. 3rd ed. Palo Alto, CA: Consulting Psychologists Press; 1996. However, subsequent studies have not agreed on the nature of these domains and factors for reasons related to the nature of the work environment, the culture of society, and the prevailing cultural pattern.

The dimensions of psychological resilience are represented by commitment, which is a type of psychological contract that an individual makes towards himself, his goals, his values, and others around him; control, which refers to the extent to which an individual believes he can control the events he encounters and bear personal responsibility for what happens to him. The dimension of control includes (the ability to make decisions, choose between multiple alternatives, the ability to interpret and appreciate stressful events, the ability to cope effectively, and exert effort with a strong motivation to achieve and challenge); and the third dimension of psychological resilience, challenge, which is the person's belief that the change that occurs in aspects of his life is exciting and necessary for growth rather than a threat, which helps him take initiative, explore the environment, and identify the psychological and social resources that help the individual cope with pressures effectively. (Shaher Yaghi, 206 AD: p. 38).

Psychological resilience is an important and fundamental personality factor in improving psychological performance, mental and physical health, and maintaining healthy behaviors. Many studies have indicated the importance of psychological resilience as a factor in resistance to stress and crises.

### **Research Problem:**

Female students' feelings of combustion lead to many educational problems that negatively impact the performance of teachers and students alike. This combustion limits students' ability to perform and manage classrooms. It is also a powerful factor in psychological stress, poor personal achievement, loss of self-identity, and personality disintegration among female students (Yaqoub, 2006, 89). Through her academic work and discussions with a significant number of female students and colleagues at the university, the researcher observed behavioral indicators of combustion among some female students, including difficulties adjusting to the academic environment and difficulties with interpersonal relationships.

A burnt-out student represents a heavy burden if she remains in the field of education college, because the behavior resulting from this combustion directly affects her interaction with the learners she teaches. Given the seriousness of this issue, many studies have been conducted to uncover the sources of combustion among female students. These studies varied in the variables they addressed, but most of them agreed that the teaching profession is the profession that causes the most combustion (Lotfi 2014: 48). The negative effects of this combustion appear among teachers in the form of a decrease in self-efficacy, signs of physical and emotional exhaustion, personality dissipation, inability to self-control, and a desire to leave the profession (Comerchero, 2018: 4943). Combustion contributes to the occurrence of many negative responses and attitudes towards oneself and others, and affects female students' professional and academic productivity and their ability to adapt and control the professional challenges they face inside and outside the classroom. These negative effects of combustion are not limited to the burnt-out individual only, but rather they extend to include those around him and those who interact with him at all professional, social and family levels (Browsers, & Tomic, 2010: 4874) Kobasa concluded that psychological resilience is a set of psychological characteristics that include variables of commitment, clarity of goal, control, and challenge. These characteristics are capable of maintaining psychological and physical health and psychological security despite exposure to stressful events (Al-Yaziji, 2011: 229).

This is what was found in the study of Abdullah (2015), the study of Fives et al. (2015), the study of Interview (2016), the study of Walker (2018), and the study of Friedman (2019). The results of the study revealed that teachers with less than 10 years of experience suffered from higher levels of depression and combustion and a lower level of educational effectiveness. The results of the study also revealed the presence of significant effects of the dynamics and cultural backgrounds of teachers on their professional performance, and that teachers in the early grades of the stage felt more self-efficacy and less combustion than their peers from teachers in the upper grades.

This is also what was confirmed by studies on psychological resilience, such as: Radhi's study (2018), Al-Hadi's study (2017), Ali's study (2019), Abdul Latif's study (2020), Ibrahim's study (2017), Abdul Hamid's study (2022), and the most important results indicated the presence of statistically significant differences at the 0.01 level in the post-measurement in the level of psychological resilience in favor of the experimental group and the presence of statistically significant differences at the 0.01 level in the post-measurement in the level of psychological stress in the best direction in favor of the experimental group.

This is also what was confirmed by studies on psychological resilience, such as: Radhi's study (2018), Al-Hadi's study (2017), Ali's study (2019), Abdul Latif's study (2020), Ibrahim's study (2017), Abdul Hamid's study (2022), and the most important results indicated the presence of statistically significant differences at the 0.01 level in the post-measurement in the level of psychological resilience in favor of the experimental group and the presence of statistically significant differences at the 0.01 level in the post-measurement in the level of psychological stress in the best direction in favor of the experimental group.

### **Significance of the Study:**

The importance of the current study is evident in two aspects: theoretical and applied, as follows:

Theoretical Significance:

1- The importance of this study lies in the importance of the target group, namely female students

at the College of Applied Education in the State of Kuwait the teachers of the future. They bear the responsibility of raising the standards of male and female students at various educational levels. It is worth noting that this group, despite its importance in society, has not received a significant share of study and research by researchers

2- The current study contributes to emphasizing the positive role that psychological resilience plays in addressing combustion, with the aim of achieving an advanced level of mental health.

3- It is considered one of the first studies to the best of the researcher's knowledge to address the phenomenon of combustion and its relationship to psychological resilience among female students at the College of Applied Education in the State of Kuwait.

#### Practical Importance:

1. Opening the way for researchers to conduct studies on combustion and resilience across all age groups and in various fields, as these are among the most important emotional variables.

2. The results of the study may benefit psychologists and social workers in developing training and counseling programs to enhance both combustion and resilience among parents of female students with low levels of combustion and resilience.

3. The study may be used to design future programs to help College of Education students adapt to their surrounding environment and achieve psychological resilience.

4. The results of the current study may benefit those working with College of Education students, providing a program to develop combustion and resilience among parents of students in the College of Applied Education.

#### Research Objectives:

1. To measure the level of combustion among female College of Education students and evaluate its statistical significance.

2. To identify differences in combustion according to variables (academic stage - academic specialization) among female College of Education students and evaluate its statistical significance.

3- Measuring the level of psychological resilience among female students in the College of Education and evaluating its statistical significance.

4- Identifying differences in psychological resilience according to variables (academic stage - academic specialization) among female students in the College of Education and evaluating its statistical significance.

To identify the correlation between combustion and psychological resilience among female students in the College of Education and evaluate its statistical significance.

Research Limits: The current research is limited to female students in the College of Education and Applied Education at Kuwait University in the second semester of the 2021-2022 academic year.

#### Definition of Terms:

First: Combustion:

- Definition by Schaufeli, Maslach, and Marek (1993): It is a syndrome of exhaustion that

negatively affects an individual's vitality, as well as their goals, self-concept, and attitudes toward life and sports. (Schaufel et al., 1993, p. 464)

- Definition by Schaufeli and Maslach (1993): It is the exhaustion among students that results from a pessimistic attitude toward schoolwork and excessive academic demands on students. (Schaufeli, Maslach, Marek, 1993, p. 464)

Maslach & Lister (2006) definition: It is a psychological state characterized by a set of negative traits, such as tension, instability, a tendency toward isolation, and negative attitudes toward work and colleagues. (Maslach & Lister (2006, p. 6)

Second: Psychological resilience:

Kobasa (1979) definition: It is the psychological construct composed of self-control, commitment, and the ability to challenge oneself in the face of high levels of stress without developing psychological or physical illness. (Kobasa, 1977, p. 3)

Brooks (2005) definition: It is the individual's ability to deal effectively with psychological stress and adapt to daily challenges and difficulties, to develop specific goals, and to solve problems smoothly with others.

(Brooks, 2005, p. 297)

- Kalantar et al. (2013) defines it as a general belief and feeling within an individual consisting of three factors: commitment, challenge, and control, which determine an individual's effectiveness in facing stressful life events. (Kalantar et al., 2013, p. 68)

-Research Tools

Research Sample: The study sample consisted of (230) female students from the College of Applied Education in the State of Kuwait, for the second semester of the academic year (2021-2022).

Procedures for Developing a Combustion Scale

**Combustion** Scale: After reviewing the previous scales, the researcher decided to adopt the Maslach Combustion Scale, which consists of 15 paragraphs, along with its instructions, alternatives, and a method for correcting those alternatives.

Statistical Analysis Procedures:

First: Extracting the Discriminatory Power of the Scale Paragraphs

In order to retain the good paragraphs and determine their accuracy in measuring what they were designed to measure, the researcher statistically analyzed the scale paragraphs and determined their discriminatory power and correlation with the total score. Paragraphs with discriminatory power are those that distinguish between respondents with high scores and respondents with low scores in the concept measured by the paragraphs. If an item is unable to discriminate according to this method, it is deemed useless and should be deleted from the final version of the scale. The researcher used the Extreme Groups Method for a sample of 230 female students, and it was found that all paragraphs were distinct at a significance level of (0.05).

Second: The relationship of the item to the total score of the scale:

This method aims to find the correlation coefficient between performance on each item of the

scale and performance on the entire scale. One of the advantages of this method is that it provides a homogeneous scale across its paragraphs. The validity of the scale can be verified by linking its paragraphs to an external or internal criterion, and the best internal criterion is the final score of the scale itself. In order to verify the validity of the scale, the researcher relied on the total score of the scale, which is an internal criterion through which the validity coefficients of the scale paragraphs can be extracted. Pearson's correlation coefficient was used to extract the correlation between each paragraph and the total score of the scale using the same analysis sample of paragraphs amounting to (230) female students. It was found that all paragraphs are statistically significant at the level of significance (0.05). After obtaining the results and comparing the correlation coefficients with the tabular value of the correlation coefficient, it was found that all paragraphs are statistically significant at the level of (0.05). According to the discrimination criterion and the relationship of the paragraph to the total, the number of paragraphs of the combustion scale among female students in its final form reached 15 paragraphs.

### **Validity:**

First: Apparent validity was verified by presenting the scale to a sample of arbitrators who expressed their approval of the scale's paragraphs, instructions, and alternatives.

Second: Construct validity: To achieve construct validity, the researcher used exploratory factor analysis using the principal components method to verify the nature of the factorial structure of the 15-item combustion scale. A total of 230 questionnaires were subjected to factor analysis. The analysis demonstrated the quality and validity of the correlation matrix used for the analysis, as most correlation coefficients were higher than 0.0005, which is statistically significant at a significance level of 0.05, indicating the availability of a minimum level of correlations between the variables. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy index (KMSA) for sampling adequacy was 0.897, which is greater than 0.50, indicating the suitability and sufficiency of the research sample for conducting factor analysis. The factor analysis using the principle components method resulted in extracting three factors with a latent root greater than (1) after rotating the axes using the varimax method for 25 times. Six paragraphs were saturated on the first factor with a latent root of 4.607 and an explained variance of 30.712 and was called the efficiency factor. While 6 paragraphs were saturated on the second factor with a latent root of 3.251 and an explained variance of 21.674 and was called the numbness factor. As for the third factor, three paragraphs were saturated on it with a latent root of 2.702 and an explained variance of 18.015 (3-2-1) and was called the exhaustion factor. Accordingly, the combustion scale in its final form consisted of 15 paragraphs.

### **Scale Reliability:**

Reliability was determined using Cronbach's alpha and split-half methods. The Cronbach's alpha reliability coefficient was 0.90, and the retest reliability coefficient was 0.92, which is a reliable reliability coefficient.

### **Statistical Indicators of the Combustion Scale**

These indicators were obtained by applying the Statistical Package for the Social Sciences (SPSS) to all members of the research sample, which numbered (230) female students. The arithmetic mean of combustion among the female students was 23.62, the arithmetic median was 22.50, the standard deviation was 17.39,

the variance was 302.4, and the skewness coefficient was 0.675. From the aforementioned indicators, we can conclude that the characteristics of the distribution of scores of the members of the current research sample are similar to the characteristics of a normal distribution, which provides an indication of the sample's representativeness of the studied population and, consequently, the possibility of generalizing the results.

### **Procedures for Developing a Psychological Resilience Scale**

After reviewing the previous scales, the researcher decided to adopt the Psychological Resilience Scale by researcher Sayed El-Shabrawy, which consists of 39 paragraphs, along with its instructions, alternatives, and the method for correcting those alternatives. Statistical Analysis Procedures for the Psychological Resilience Scale

First: Extracting the discriminating power of the scale's paragraphs

The researcher used the same procedures used in analyzing the first scale, namely the Extreme Groups Method and the relationship of the item score to the total score of the research sample of 230 female students. It was found that all paragraphs were discriminating at a significance level of (0.05). It was also found that all paragraphs were statistically significant at a level of (0.05). Based on the discrimination criteria and the item-to-total relationship, the number of paragraphs on the final version of the Psychological Resilience Scale for Female Students reached 39 paragraphs.

### **Validity:**

First: Apparent Validity. Apparent validity was verified by presenting the scale to a sample of arbitrators who expressed their approval of the scale's paragraphs, instructions, and alternatives:

Second: Construct validity: To achieve construct validity, the researcher used exploratory factor analysis using the principal components method to verify the nature of the factor structure of the psychological resilience scale consisting of 39 paragraphs, where 230 questionnaires were subjected to factor analysis. The analysis resulted in the quality and validity of the correlation matrix for the analysis, as most of the correlation coefficients were higher than 0.0005, which is statistically significant at a significance level of 0.05, indicating the availability of the minimum level of correlations between the variables. The value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy index for sampling adequacy reached 0.935, which is greater than 0.50, indicating the suitability and sufficiency of the research sample to conduct the factor analysis. The chi-square value for the Bartlett's test of sphericity for factor analysis was 6009.685, which is statistically significant at a significance level of 0.000 (Tegza 2012, p. 31). Exploratory factor analysis of the psychological resilience scale resulted in the crystallization of two factors. The latent root of the first factor was 10.994, with an explained variance of 28.189, while the latent root of the second factor was 9.387, with an explained variance of 23.630. The first factor consisted of 22 paragraphs and was called the commitment factor, while the second factor consisted of 17 paragraphs and was called control. Therefore, the psychological resilience scale, in its final form, consisted of 39 paragraphs. Reliability of the scale: Reliability was determined using Cronbach's alpha and split-half methods. The reliability coefficient using Cronbach's alpha was 0.96, and the retest was 0.97, which is a reliable reliability coefficient.

### **Statistical Indicators for the Combustion Scale**

These indicators were obtained by applying the Statistical Package for the Social Sciences (SPSS) to all members of the research sample, which numbered (230) female students. The

arithmetic mean of psychological resilience among the female students was 143, the arithmetic median was 141, the standard deviation was 30.5, the variance was 930.2, and the skewness coefficient was 0.514. Based on the aforementioned indicators, we can conclude that the characteristics of the distribution of scores among the members of the current research sample are similar to the characteristics of a normal distribution, which indicates the sample's representativeness of the studied population and, consequently, the possibility of generalizing the results.

### Research Results:

1- Measuring the level of combustion among female students in the College of Education and evaluating its statistical significance.

The research results, after applying the combustion scale to the applied research sample of (230) female university students, showed that the significance of the difference between the arithmetic mean and the hypothetical mean of the combustion scale, which was tested through a single-sample t-test, was statistically significant at a significance level of 0.05, indicating that the research sample does not suffer from combustion. Note that the hypothetical mean was calculated by multiplying the average scores of the alternatives by the number of items, as shown in the table.

| Mean,   | Arithmetic mean | Standard Deviation | Hypothetical mean | Test value for significant differences | Result   |
|---|-----------------|--------------------|-------------------|--|----------|
| combustion  | 23.62           | 17.38              | 37.5              | -12.103                                | function |
| <ul style="list-style-type: none"> <li>The tabular t-value for the two-tailed test at a significance level of 0.05 = 1.960</li> </ul> |                 |                    |                   |  |          |

Table (1)

T-test for the difference between the average combustion scores of female students in the College of Education and the hypothetical mean of the sample.

The data of the table indicate that the students of the Faculty of Applied Education at Kuwait University recorded a low degree of psychological combustion, which indicates that they do not suffer from combustion syndrome, which negatively affects the vitality of the individual, as well as his goal, self-concept and attitudes towards life and sports.

To identify differences in combustion according to the variable of academic level among female students in the College of Education and evaluate its statistical significance. To achieve this goal, the data were statistically processed using a one-way ANOVA for unequal samples using the SPSS statistical program. The calculated p-value for psychological resilience was 4.120, which is greater than the tabulated p-value of 2.98 at two degrees of freedom of 3-226 and a significance level of 0.05. This indicates that there are differences in resilience according to the academic level among female students in the College of Education. Table (2) illustrates this.

| Sources of variance | Total Quadrants | degrees of | Average total quadrants | Calculated F test value |
|---------------------|-----------------|------------|-------------------------|-------------------------|
|---------------------|-----------------|------------|-------------------------|-------------------------|

|  |          |                |         |       |
|--|----------|----------------|---------|-------|
|  |          | <b>freedom</b> |         |       |
| Between Individuals  | 3590.83  | 3              | 1196.94 | 4.119 |
| Within Individuals   | 65659.25 | 226            | 290.52  |       |
| Total  | 69250.09 | 229            |         |       |
| •Tabular net value at a degree of freedom (3-226) and an indicative level of 0.05 is equal to 2.98 |          |                |         |       |

Table (2)

First-order analysis of variance to identify differences in psychological combustion according to the academic level among female students in the College of Education.

The table data indicates that there is a variation in the level of combustion among female students according to the variable of academic stage, with statistical significance at the 0.05 level.

3- Identifying differences in combustion according to the variable of academic specialization among female students in the College of Education and evaluating its statistical significance.

To achieve this goal, a t-test for two independent samples was used to compare the average combustion scores of the two groups according to the variable of academic specialization. The calculated t-value for the significance of the difference between the means of the two groups was 0.745, which is smaller than the tabulated t-value of 1.980 at a degree of freedom of 122 and a significance level of 0.05. This indicates that there are no statistically significant differences in combustion among female students in the College of Education between those with scientific and humanities specializations, as the table illustrates.

| <b>variable</b>  | <b>type of study</b> | <b>number</b> | <b>weighted average</b> | <b>standard deviation</b> | <b>T-test value</b> |
|--|----------------------|---------------|-------------------------|---------------------------|---------------------|
| Psychological combustion   | Scientific           | 117           | 24.46                   | 17.832                    | 3.292               |
|  | Humanitarian         | 113           | 22.75                   | 16.954                    |                     |
| • The tabular T value of the two-end test at an indicative level of 0.05 = 1.980 |                      |               |                         |                           |                     |

Table (3)

T-test for two independent samples to identify differences in measuring combustion among female students in the College of Education according to the variable of scientific specialization.

The table shows that the research sample of female students with science majors recorded a higher degree of combustion than their peers with humanities majors.

4- Measuring the level of psychological resilience among female students in the College of Education and evaluating its statistical significance.

The research results, after applying the psychological resilience scale to the applied research sample of 230 female university students, showed that the significance of the difference between the arithmetic mean and the hypothetical mean of the psychological resilience scale, which was tested through a single-sample t-test, was statistically significant at a significance level of 0.05, indicating that the research sample enjoys a high level of psychological resilience. Note that the

hypothetical mean was calculated by multiplying the average scores of the alternatives by the number of items, as shown in the table.

| Scale  | weighted Average | Standard deviation | Hypothetical Average | t test value for difference indication | Result          |
|--|------------------|--------------------|----------------------|--|-----------------|
| mental toughness   | 143.02           | 30.508             | 117                  | 12.937                                 | <b>function</b> |
| <ul style="list-style-type: none"> <li>The tabular T value of the two-end test at an indicative level of 0.05 = 1.960</li> </ul> |                  |                    |                      |  |                 |

Table (4)

T-test for the difference between the average psychological resilience scores of female students in the College of Education and the hypothetical mean for the sample

The table shows that the research sample of female students recorded a high degree of psychological resilience with statistical significance.

5- Identifying differences in psychological resilience according to the variable of academic stage among female students in the College of Education and evaluating its statistical significance.

To achieve this goal, the data were statistically processed using a first-order analysis of variance for unequal samples (One-Way ANOVA unequal sample)

using the statistical program SPSS. The calculated p-value for psychological resilience was 0.769, which is smaller than the tabular p-value of 2.98 at two degrees of freedom of 3-226 and a significance level of 0.05. This indicates that there are no differences in resilience according to academic stage among female students in the College of Education, as the following table illustrates.

| Sources of variance  | Total Quadrants | degrees of freedom | Average total quadrants | Calculated F test value |
|--|-----------------|--------------------|-------------------------|-------------------------|
| Between Individuals  | 2155.18         | 3                  | 718.39                  | 0.769                   |
| Within Individuals   | 210994.63       | 226                | 933.60                  |                         |
| Total  | 213149.84       | 229                |                         |                         |
| <ul style="list-style-type: none"> <li>The tabular p-value at a degree of freedom of (3-226) and a significance level of 0.05 is equal to 2.98.</li> </ul> |                 |                    |                         |                         |

Table (5)

First-order analysis of variance to identify differences in psychological resilience according to academic stage among female students in the College of Education.

| Sources of variance  | Total Quadrants | degrees of freedom | Average total quadrants | Calculated F test value |
|--|-----------------|--------------------|-------------------------|-------------------------|
| Between individuals  | 2155.18         | 3                  | 718.39                  | 0.769                   |
| Within individuals   | 210994.63       | 226                | 933.60                  |                         |
| Total  | 213149.84       | 229                |                         |                         |
| •• Tabular value at a degree of freedom (3-226) and a significance level of 0.05 is 2.98 |                 |                    |                         |                         |

The table shows that there are no differences in psychological resilience among female students according to the variable of academic stage. 6 - Identifying differences in psychological resilience according to the variable of academic specialization among female students in the College of Education and evaluating its statistical significance. To achieve this goal, a t-test for two independent samples was used to compare the average psychological resilience scores of the two groups according to the variable of academic specialization. The calculated t-value for the significance of the difference between the means of the two groups was equal to 0.423, which is smaller than the tabulated t-value of 1.980 at a degree of freedom of 122 and a significance level of 0.05. This indicates that there are no statistically significant differences in psychological resilience among female students in the College of Education between those with scientific and humanities specializations. Table (6) illustrates this. The t-test for two independent samples to identify differences in measuring psychological resilience among female students in the College of Education according to the scientific specialization variable.

| Variable  | Type of study | Number | Weighted average | Standard deviation | T-test value |
|---|---------------|--------|------------------|--------------------|--------------|
| Psychological combustion  | Scientific    | 117    | 142.18           | 31.005             | 0.423        |
|   | Humanitarian  | 113    | 143.89           | 30.099             |              |
| Tabular t-value of the two-ended Test at the significance level of 0.05=1.980 |               |        |                  |                    |              |

The table shows that there are no differences between female students in psychological resilience based on the scientific specialization variable.

7- Identify the correlation between combustion and psychological resilience among female students in the College of Education and evaluate its statistical significance.

To achieve this goal, the eta correlation coefficient was used to determine the relationship between the two variables. The value of the correlation coefficient was 0.560, indicating a moderate relationship between the two variables. When the level of combustion among female students decreases, their level of psychological resilience increases. Evaluating the significance of the correlation coefficients using the t-test, the calculated t-values were found to be 10.206, which is greater than the table value at a significance level of 0.05 and a degree of freedom of 228. This indicates that the relationship between them is real and not subject to chance.

Recommendations: In light of the research results, the researcher recommends the following:

- Focus on studying the levels of combustion and psychological resilience among students, as they are important and effective variables in developing the components of mental health among students.

2- Employ available resources within the university environment, including media and public relations units, to promote psychological culture, helping students develop their personalities and address the problems they encounter in their daily lives.

3- Use counseling programs to develop some concepts of mental health among students, helping them adopt a life philosophy that can be applied later in their professional and practical lives.

Suggestions: In light of the research results, the researcher proposes the following:

1- Conduct a survey study on the reality of combustion among other samples in society, such as those working in government and private sector jobs.

1- Conduct a study examining the relationship between combustion, cognitive structures of the self, and cognitive abilities among university students.

2- Conduct an experimental study on the impact of psychological resilience on shaping self-image, life satisfaction, and psychological well-being among males and females.

## **References**

- Ibrahim, Maya Barakat (2017). Evaluating Teacher Self-Efficacy and Its Relationship to Classroom Management and Combustion. Unpublished Master's Thesis, Institute of Educational Studies, Cairo University.
- Tighza, Amhamed Bouzian (2012). Exploratory and Confirmatory Factor Analysis, Dar Al-Masirah, Amman, Jordan, First Edition.
- Abdel Hamid, Laila Abdel Hafez, (2022). The Extent of Female Teachers at Different Educational Levels in the Kingdom of Saudi Arabia Exposure to Work Stress in the Form of Combustion. Journal of the Faculty of Education, Sohag, Assiut University, pp. 201-233.
- Abdullah, Adel, (2015). Some Personality Traits, Gender, Length of Experience, and Their Impact on Teacher Combustion. Journal of Psychological Studies, Association of Psychologists, pp. 345-376.
- Abdul Latif, Lulua Hassan (2020): Psychological resilience and the desire for control among students of the College of Education, Journal of Psychological Studies, Vol. 12, No. (2): 229-273.
- Lutfi, Ziad Tahaineh (2014). Levels of combustion among physical education teachers in Jordan and their relationship to some variables. Unpublished master's thesis, College of Graduate Studies, Jordanian College of Education.
- Interview, Nasr Yousef (2016). The Relationship Between Locus of Control and Combustion among a Sample of Teachers. Psychology Journal, Tenth Year, Issue Thirty-Nine, pp. 110-119.
- Al-Yaziji, Muhammad Rizq (2011). "The Attitude Towards Psychological Risk-Taking and Its Relationship to Psychological Resilience: A Field Study on the Palestinian Police, Palestine." Master's Thesis in Psychology/Psychological Counseling, Faculty of Education, College of Islamic Education, Gaza.
- Yaghi, Shaher Yousef (2016). "Psychological Stress among Workers in the Gaza Strip and Its Relationship to Psychological Resilience." Unpublished Master's Thesis, Department of Psychology, College of Education, College of Islamic Education, Gaza.
- Yaqoub, Ali Jaafar (2006). "The Extent of Exposure of Secondary School Teachers in the State of Kuwait to the Phenomenon of Psychological Combustion." Educational Journal, College of Education, Kuwait University, Issue 10, Vol. 3, pp. 9-43.

Second: Foreign References

- Billage. (2006) Examining the combustion of academics in relation to job satisfaction and other factors, social behavior and personality
- Brooks, R.B. (2005) The power of Parenting. IN R.B. Brooks, Goldstein()  
Ens, Handbook of Resilience in Children. New York. Kluwer Academic,
- Browsers, A. & Tomic, W. (2010) Disruptive Student behavior perceived self efficacy and teacher combustion. Dissertation Abstracts International 60 (6 – B) 2113.
- Comerchero, V. (2018). Gender, tenure status, teacher efficacy, perfectionism and teacher combustion. Dissertation Abstracts International 69 (2-A) 501.
- Fives, H & Hamman, D & Oliverese, A. (2015). Does combustion begin with student teaching? Analyzing efficacy, combustion, and support during the student-teaching semester. Paper Presented at the Annual Meeting of American Educational Research Association. (San Francisco).
- Friedman, I. A. (2019). High and low combustion school, school Culture aspects of teacher combustion. Journal of Educational Research, 124 (6) 325-333.
- Kalantar, J., Khedri, L., Nikbakht, A., & Motvalian, M. (2013). Effect of psychological hardiness training on mental health of students. International Journal of Academic Research in Business and Social Sciences, 3(3), 68.
- Kobasa, Suzanne C. (1979) "Stressful Life Events, Personality and Health, An Inquiry into Hardiness" J. of Per and Soc. Psych, Vol.37, No.37 (1).
- Schaufeli WB, Martinez I, Pinto AM, Salanova M, Bakker A. Combustion and engagement in university students: A cross-national study. J Cross Cult Psychol. 2002;33:464–81. doi: 10.1177/0022022102033005003
- Schaufeli WB, Maslach C, Marek T. Professional combustion: Recent developments in theory and research. Washington DC: Taylor & Francis; 1993.
- Swearingen, M. K. (2010). Teacher-eficacy and cultural receptivity as predictors of combustion in novice urban teachers after one year of teaching. Dissertation Abstracts International 70 (9-A) 3345.
- Walker, Bleinda Ann (2018). A study of the Relationship between teacher burn out and their tolerance of disturbing classroom behavior. Dissertation Abstract International 52 (9) 32903.