# Status of the Psychological Resilience among the University Students

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## ABSTRACT

The present study aims to assess the level of psychological resilience among the university students, taking into account variables such as gender, specialization, and study level. The significance of this study lies in the unique nature of the target sample, which comprises students from various disciplines and represents a crucial segment and the future foundation of society. To conduct the study, a stratified random sample was selected from three specified universities, with a sampling percentage of 0.05. The study sample consisted of 1060 male and female students. The researcher utilized a self-designed psychological resilience scale to collect data. The obtained data was then analyzed using the Statistical Package for Social Sciences (SPSS) software, employing statistical techniques such as the Pearson correlation coefficient, Alpha-Cronbach coefficient, one-sample t-test, two-independent samples t-test, and one-way analysis of variance. The results indicated a high level of psychological resilience among university students, as reflected in the total score of the resilience scale. Furthermore, statistically significant differences were observed between male and female students regarding their average resilience scores, with males showing higher levels of psychological resilience. However, no significant differences were found between genders in terms of self-efficacy and optimism dimensions on the psychological resilience scale. Moreover, the study revealed no statistically significant differences in the level of psychological resilience among students from different specializations or study levels. The findings contribute to a better understanding of the psychological well-being of this important segment of society, which can inform the development of targeted interventions and support systems to enhance the resilience and overall mental health of university students.

**Keywords**: Psychological resilience, Exploratory stage, Impact study stage, and Developing stage.

## INTRODUCTION:

Best known as the digital age, the present day era is characterized by increasingly successive rapid developments and changes. Nowadays, we are surrounded by worlds of the technological, electronic devices and digital application which have transformed our concept of the time and space, imposing new behavioral patterns and trans-global values, cultural and conceptual systems. Subsequently, wide-ranging challenges have emerged calling for more psychological flexibility at the individual, communal and institutional level to deal with such changes. In the past, conventional psychology paid attention to the personality negative traits among individuals coming under life

stress and pressures. However, with Seligman and his colleagues (1998-2000) positive psychology introduction, personality has been looked at from an innate (positive) human point of view. Positive psychology included three main dimensions, the first one focusing on the positive subjective experience of happiness, well-being, flow, pleasure, flexibility, hope, optimism, and positive emotions. The second dimension concentrates on positive traits that include talents and interests, creativity, wisdom, values, personal strengths, meaning, purpose, growth and courage. The third axis focused on the positivity of families, schools, universities, companies, local social groups, societies, civil institutions that push individuals towards equal citizenship, caring for others, altruism, wisdom, the moderation, and tolerance (Donaldson & Ko, 2010).

Seligman and Csikszentmihalyi, (2000) see that individuals are naturally capable of maintaining their psychological and mental health, and treating their adaptive disorders through positive innate personality traits more than negative traits. Psychological resilience is viewed as one of the main topics of psychology being a positive individual force (Ercan, 2017). Psychological resilience phenomenon is one of the main areas of research in contemporary psychology literature, especially in the field of applied positive psychology. Al-Assar (2010) sees that psychological resilience is one of positive psychology major structures. Positive psychology is the approach that maximizes human powers as inherent forces in man versus prevailing and common aspects that focus on human shortcomings and weaknesses. Al-Assar views that the term resilience means (Hardiness, Flexibility, Prevention, and Motivation), thus exceeding the linguistic meaning of resilience to the psychological significance of the word psychological resilience in its common sense (Al-Assar, 2010), as shown in the following figure:



**Fig 1:** Psychological resilience term implications.

Resilience is important for people at risk, such as those living in poverty, in disaster and war zones, or those who suffer from chronic disease conditions because they have to effectively confront and positively coexist with these conditions (Abu Halawa A, 2013). Psychological resilience is a relatively new concept that has received the attention of researchers as an evolution of positive psychology studies and focused on the role of prevention and protection factors in the management of adversity and crisis, It has taken center stage in the field of so-called risk research. Ample evidence confirms that it is dynamic and subject development and enrichment (Al-Buhairi, 2010). Resilience plays an important role in the individual's balance events, whether internally or externally. It is closely related to optimism, hope, sense of humor, and sense of social support. Besides, it is negatively related to depression, despair, and a sense of pain (Smith *et al.*, 2008; Uddin *et al.*, 2022).

**Psychological Resilience Concept**
In the American Psychological Association, "Psychological resilience is defined as a process of good conformity and positive response to adversity, trauma, calamities or the psychological stress that individuals face. It also means the ability to surmount or surpass it positively and continue life effectively and competently (APA, 2002).

**Stages of Studying Psychological Resilience**
The study of psychological resilience has gone through three different stages, as listed below (Abbas, 2010):

**1. First Stage: Exploratory Stage**
Here, the focus is placed on the various factors associated with psychological resilience, the most important of which are subjective, environmental, family and societal factors.

**2. Second Stage: Impact Study Stage**
This stage focuses on studying the effect of family, cultural and societal factors on achieving psychological resilience in the individual. In turn, the interactive theory emerged, which is concerned with the role of these factors in achieving the positive outcomes of the individual, which in turn leads to instilling psychological resilience within him.

# 3. Third Stage: Developing Psychological Resilience Stage

This stage focuses on employing the previous two phases' outcomes in developing the individual's psychological resilience. Hence it pays attention to the study of psychological intervention programs, the most famous of which is the Pennsylvania University's program, focusing on emotional social learning, paying more attention to areas of societies that suffer from deprivation and marginalization. From the foregoing discussion, it becomes clear that psychological resilience as a concept means the individual's ability to resist the problems, difficulties and hardships that confront him, so he adapts to and overcomes them. As such, he regains his psychological balance once such hardships, crises and pressures go away.

**Theories Explaining Psychological Resilience**

Psychological resilience is an essential source of mental health in a person's personality. It determines how far the individual is able to adapt to various environmental changes. In psychology, there are several theories for this concept, including the following:

**1. Richardson's Theory**

One of the first theories to explain psychological resilience process is Richardson's theory, formulating concepts for resilience as the inherent force within each individual which drives him/her to achieve self-realization, altruism and wisdom, and that the individual has to be in full harmony with the spiritual source of strength. The basic assumption of this theory lies in the idea of spiritual biological psychological balance (equilibrium), which allows us to adapt (body, mind and spirit) to current conditions of life. Psychological pressures and other unexpected and unexpected life events or urgent life requirements affect our ability of adaptation. Face such events in life is influenced by resilience traits, reintegration with previous resilience and the interaction between daily psychological pressures and protective factors (Richardson, 2002; Hadiloo, 2023).

**2. Self-Development Theory**

Attia (2011) reports, quoting Saakvine et al. (1998) in their self-development theory, that the symptoms of trauma survivors are those of adaptive strategies that arise to manage threats to self-integration and safety, expected to be impacted by shocking events facing

self domains. One of the clear concepts in this theory is Reference Frame concept (Attia, 2011). There are five personal areas influenced by painful events.

The first area is the individual's normal way of the understanding the self-world, including spirituality. The second area relates to personal ability, defined as the ability to perceive and bear emotion, and to maintain internal connection with the self and others. The third area is that which is affected by the resources necessary to meet psychological needs in natural ways, including the ability of self-monitoring. The fourth aspect is that which is influenced by the concept of central psychological needs, reflected in the torn cognitive schemes in five dimensions (safety, confidence, control, respect and intimate relations). At last, the fifth area relates to sensory memory cognition system including both biological adaptations and sensory experiences (Wald *et al*., 2006).

**Review of Literature**

The study Ismaeel, (2017) aimed to identify the level of psychological resilience, and the level of mindfulness, and identifying the relation between psychological resilience and mindfulness of college of the education student, in addition to identifying the predictability of the mindfulness through psychological resilience. The sample of (223) male and female students who were enrolled in the third year, college of education, with an age range of 21-23. Results showed the following: there are low levels of psychological resilience among the sample of the study. There are above average levels of mindfulness among the sample of the study. There is a positive statistically significant correlation at 0.01 levels between psychological resilience and mindfulness, in addition, mindfulness contributed to the predictability of psychological resilience among the sample of the study.

The study Shaqoura, (2012) aimed to know the level of psychological resilience and satisfaction of life among Palestinian university students in addition to knowing whether there is a relationship between psychological resilience and satisfaction with life among Palestinian university students. The sample of the study consisted of (600) male and female students. The researcher used the analytical descriptive method. In order to achieve the objectives of the study, the

researcher prepared a measure of "psychological resilience" and another measure of "satisfaction with life." The results of the study found that there is a high level of psychological resistance and satisfaction with life in the students, the existence of a positive correlation between psychological resilience and satisfaction with life, there are differences in statistical evidence of psychological resilience depending on the gender variable in favor of males.

## The Statement of the Study

Psychological resilience is the basis of a sound good personality. A person capable of the responding to different situations is called a flexible individual. It is the good psychological compatibility with the bad circumstances and stressful life situations facing the individual, reflecting his / her ability to overcome such hardships positively to continue life effectively and efficiently. Such is the concept of the psychological resilience which characterizes the sound good personality. Psychological Resilience is the basic part of the positive psychology which deals with positive and good aspect of the human beings behavior and morals. It intends to empower and strengthen the positive aspects and how to develop these aspects in their behavior. This study aims to encourage the adults to empower their positive aspects to encounter the human life challenges and difficulties. Adulthood is one of the most dangerous stages in the life of human being so he is being vulnerable for different changes in his life. Psychological Resilience affects the structure of the personality and makes it capable to face all the difficulties. It also makes a person able to solve his or her problems and achieve self-competent. This could make a positive character that has inner balance. Positive psychology empowers the human strength rather than the common aspects which empower weakness and limitation in the human life (Goldstian and Brooks, 2004).

Based on the above, and based on the role of psychology and psychologists in serving the community and human potential, in addition to the changes and conditions that our society is going through which undoubtedly reflected on its various social groups in general and youth in particular, and the importance of psychological resilience as a psychological and the preventive variable as well as the scarcity of Arab

studies that dealt with psychological resilience the researcher tries "to identify the level of psychological resilience among the universities students ".

## The Importance of the Study

The importance of the current study stems from its target sample, which represents an important segment of the society (universities students). This segment, involving different specializations, represents the backbone of the future of the society. Universities experience is one of the important decisive stages in the life of students. It is a test stage of a new academic and social life that includes some freedom in making decisions and choosing friends. It is the stage where an individual's academic and social future is shaped, a stage where an individual's personality growth takes place by coming into contact with classmates and the faculty members (Al-Nimr, 2016). Psychological resilience plays an important role in the individual's adaptation to the difficulties and stressful situations in life. Hence, this study focuses on the issue of the psychological resilience. There is a dire need for identifying the psychological resilience of universities students, they should have to withstand pressures of life, as well as the current research attempts to the contribute and add to the theoretical concept of psychological resilience as a worthy investigation notion.

## The Objectives of the Study
o To identify the level of psychological resilience among Universities' students.
o To know the statistically significant differences of psychological resilience among Universities students based on variables (specialization, level of study).

## The Hypothesis of the Study:
1. There is no statistical significant difference between a real mean & assumed mean in level of psychological resilience among universities students.
2. Universities students' responses average on psychological resilience scale ascribed to the gender variable (males, and females) have no statistically significant differences.
3. There are no statistical significant differences in the average responses of the universities students on the psychological resilience scale ascribed to specialization variable (Science – Humanity).

4. On psychological resilience scale ascribed to level variable (first, Second, Third, and Fourth). Universities student's average responses have no statistical significant differences.

**The Population of the Study**

The current study targets undergraduate students in twelve public universities in the Republic of Yemen.

Three public universities, namely Sana'a University, Aden University and Ibb University, were selected constituting 25% of public universities in a cluster random manner. Thus, the current research population is (21377) students of the three universities for the academic year 2020/2021 as shown in table (1).

**Table 1:** displays Study population based on university, gender, level, and major.

| Major / Level of study | | University of Sana'a | | | University of Aden | | | University of Ibb | | | Group Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Science | Humanity | Total | Science | Humanity | Total | Science | Humanity | Total | Science | Humanity | Total |
| First | Male | 826 | 1562 | 2388 | 316 | 526 | 842 | 223 | 566 | 789 | 1365 | 2654 | 4019 |
| | Female | 608 | 1096 | 1704 | 142 | 405 | 547 | 121 | 224 | 345 | 871 | 1725 | 2596 |
| | Total | 1434 | 2658 | 4092 | 458 | 931 | 1389 | 344 | 790 | 1134 | 2236 | 4379 | 6615 |
| Second | Male | 562 | 924 | 1486 | 324 | 682 | 1006 | 160 | 564 | 724 | 1046 | 2170 | 3216 |
| | Female | 887 | 1004 | 1891 | 146 | 367 | 513 | 104 | 223 | 327 | 1137 | 1594 | 2731 |
| | Total | 1449 | 1928 | 3377 | 470 | 1049 | 1519 | 264 | 787 | 1051 | 2183 | 3764 | 5947 |
| Third | Male | 565 | 967 | 1532 | 264 | 461 | 725 | 123 | 323 | 446 | 952 | 1751 | 2703 |
| | Female | 503 | 883 | 1386 | 121 | 362 | 483 | 105 | 225 | 330 | 729 | 1470 | 2199 |
| | Total | 1068 | 1850 | 2918 | 385 | 823 | 1208 | 228 | 548 | 776 | 1681 | 3221 | 4902 |
| Fourth | Male | 509 | 486 | 995 | 224 | 420 | 644 | 108 | 228 | 336 | 841 | 1134 | 1975 |
| | Female | 541 | 601 | 1142 | 123 | 426 | 549 | 104 | 143 | 247 | 768 | 1170 | 1938 |
| | Total | 1050 | 1087 | 2137 | 347 | 846 | 1193 | 212 | 371 | 583 | 1609 | 2304 | 3913 |
| group Total | Male | 2462 | 3939 | 6401 | 1128 | 2089 | 3217 | 614 | 1681 | 2295 | 4204 | 7709 | 11913 |
| | Female | 2539 | 3584 | 6123 | 532 | 1560 | 2092 | 434 | 815 | 1249 | 3505 | 5959 | 9464 |
| | Total | 5001 | 7523 | 12524 | 1660 | 3649 | 5309 | 1048 | 2496 | 3544 | 7709 | 13668 | 21377 |

As illustrated in Table (1), it is observed that the number of students of the study population reached (21377) male and female students, distributed among the three universities (Sana'a, Aden and Ibb), where the number of males reached (11913) male students. And the number of female (9464) female students. As for the specialization, the number in practical science majors was (7709) male and female students. In the humanities, the number was (13668) male and female students. With regard to level of study, the number in the first level was (6615) male and female students. In the second level, it was (5947) male and female students, and as for the third level, the number was (4902) male and female students. In the fourth level there were (3913) male and female students.

**Table 2:** displays Study samples based on universities, gender, major, and student level.

| Major / Level of study | | University of Sana'a | | | University of Aden | | | University of Ibb | | | Group Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Science | Humanity | Total | Science | Humanity | Total | Science | Humanity | Total | Science | Humanity | Total |
| First | Male | 41 | 78 | 119 | 16 | 26 | 42 | 11 | 28 | 39 | 68 | 132 | 200 |
| | Female | 30 | 55 | 85 | 7 | 20 | 27 | 6 | 11 | 17 | 43 | 86 | 129 |
| | Total | 71 | 133 | 204 | 23 | 46 | 69 | 17 | 39 | 56 | 111 | 218 | 329 |
| Second | Male | 28 | 46 | 74 | 16 | 34 | 50 | 8 | 28 | 36 | 52 | 108 | 160 |
| | Female | 44 | 50 | 94 | 7 | 18 | 25 | 5 | 11 | 16 | 56 | 79 | 135 |
| | Total | 72 | 96 | 168 | 23 | 52 | 75 | 13 | 39 | 52 | 108 | 187 | 295 |
| Third | Male | 28 | 48 | 76 | 13 | 23 | 36 | 6 | 16 | 22 | 47 | 87 | 134 |
| | Female | 25 | 44 | 69 | 6 | 18 | 24 | 5 | 11 | 16 | 36 | 73 | 109 |
| | Total | 53 | 92 | 145 | 19 | 41 | 60 | 11 | 27 | 38 | 83 | 160 | 243 |
| Fourth | Male | 25 | 24 | 49 | 11 | 21 | 32 | 5 | 11 | 16 | 41 | 56 | 97 |
| | Female | 27 | 30 | 57 | 6 | 21 | 27 | 5 | 7 | 12 | 38 | 58 | 96 |
| | Total | 52 | 54 | 106 | 17 | 42 | 59 | 10 | 18 | 28 | 79 | 114 | 193 |
| group Total | Male | 122 | 196 | 318 | 56 | 104 | 160 | 30 | 83 | 113 | 208 | 383 | 591 |
| | Female | 126 | 179 | 305 | 26 | 77 | 103 | 21 | 40 | 61 | 173 | 296 | 469 |
| | Total | 248 | 375 | 623 | 82 | 181 | 263 | 51 | 123 | 174 | 381 | 679 | 1060 |

**The Sample of the Study**

Having defined the study population, a stratified random sample was chosen with a percentage of (0.05) from the students of the three universities that were identified in the research community, and the following Table shows the distribution of research sample. **Table 2** shows the distribution of the study sample members by gender, specialization, and educational level. As illustrated in Table 2, it is observed that the

number of students of the study sample reached (1060) male and female students, distributed among the three universities (Sana'a, Aden and Ibb), where the number of males reached (591) male students. and the number of female (469) female students. As for the specialization, the number practical science majors was (381) male and female students. In humanities, the number was (679) male and female students. With regard to level of study, the number in the first level was (329) male and female students. In the second level, it was (295) male and female students, and as for the third level, the number was (243) male and female students. In the fourth level there were (193) male and female students.

## MATERIALS AND METHODS:
In the current study, the researcher used the descriptive approach, which means what exists in reality and tries to explain it.

**The Tool of the Study**
**Psychological Resilience Scale**
The researcher built a tool to measure the psychological resilience of the sample members, by following the following steps:

**1. Designing Stage**
The theoretical literature related to previous studies and research on psychological resilience, and previous standards prepared in this field were reviewed by the researcher. Then the items and articles of the scale were formulated in its initial form, with (65) items,

divided into five dimensions: optimism (11 items), emotions (14 items), social relations (14 items), mental dimension (13 items), self-efficacy (13 items). The items of the Psychological Resilience Scale were distributed into positive and negative ones as illustrated in **Table 3**.
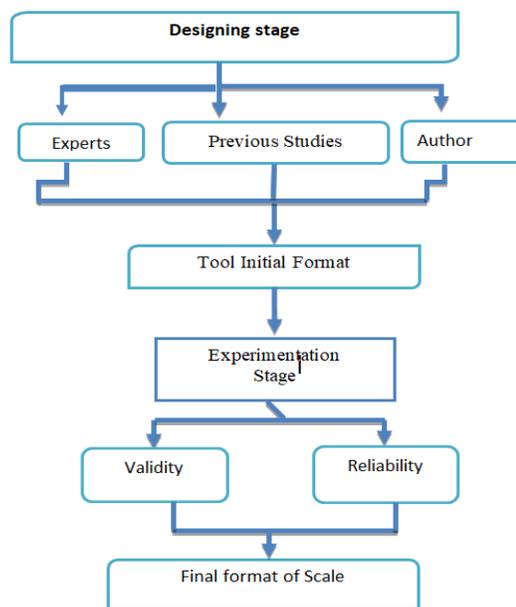


**Fig. 2:** Illustrating scale design structure.

The response scores were distributed on the scale items as follows: Positive items (Strongly agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly disagree = 1), Negative items (Strongly agree = 1 Agree = 2 Neutral = 3 Disagree = 4 Strongly disagree = 5.

**Table 3:** Shows the distribution of the items of psychological resilience scale on the dimensions in an initial way.

| Dimension | Total of items | Positive Items | Negative Items |
|---|---|---|---|
| Optimism | 11 | 1-3-5-7-8-10-11 | 2-4-6-9 |
| Emotions | 14 | 12-13-15-16-18-19-21-24-25 | 14-17-20-22-23 |
| Social Relations | 14 | 26-27-29-30-32-33-35-36-38 | 28-31-34-37-39 |
| Mental | 13 | 40-41-43-44-45-46-48-49-50-51 | 42-47-52 |
| self-efficiency | 13 | 53-54-56-57-59-60-62-63-65 | 55-58-61-64 |
| Total | 65 | 44 | 21 |

The scale's instructions were also formulated and presented to an expert of Arabic language and expert referees in the field of psychology, mental health, measurement and evaluation. It was also presented to a pilot study sample of (200) male and female students to test the clarity of the items and instructions of the scale and their ease of understanding and finding the psychometric properties of the scale.

**Experimentation Phase**
**Validity**
*Referees Validity*
To ensure the validity of the scale in this way, the initial form of the scale, was presented to (10) experts in the field of psychology, mental health, measurement and the psychological evaluation. The expert referees' remarks on validity of the items in terms of

inadequacy to measure what they were set for, or the extent to which the items belong to the dimension were noted. All items obtained 90 % agreement in terms of the experts remarks. Based on the experts' remarks, proposals, a number of the scale items were modified.

*Construction Validity*

The Pearson Correlation Coefficient was used to the verify the scale composition validity in terms of the scale items scores, the scores of the dimension to which each item belongs, using the Pearson correlation coefficient as illustrated in the following tables.

**Dimension Items Score Correlation with the Total Dimension Scores**

**Table 4:** Pearson's correlation coefficient between the degree of each paragraph in the dimension and the total degree of the dimension to which it belongs in the psychological resilience scale.

| Dimension of Optimism | | Dimension of Emotions | | Dimension of Social Relations | | Dimension of Mental | | Dimension of self-efficiency | |
|---|---|---|---|---|---|---|---|---|---|
| Item No. | Correlation Coefficient | Item No. | Correlation Coefficient | Item No. | Correlation Coefficient | Item No. | Correlation Coefficient | Item No. | Correlation Coefficient |
| 1 | 0.18// | 12 | 0.410** | 26 | 0.597** | 40 | 0.575** | 53 | 0.470** |
| 2 | 0.518** | 13 | 0.091// | 27 | 0.452** | 41 | 0.453** | 54 | 0.468** |
| 3 | 0.226** | 14 | 0.541** | 28 | 0.604** | 42 | 0.363** | 55 | 0.464** |
| 4 | 0.491** | 15 | 0.236** | 29 | 0.13// | 43 | 0.501** | 56 | 0.542** |
| 5 | 0.324** | 16 | 0.237** | 30 | 0.310** | 44 | 0.514** | 57 | 0.16// |
| 6 | 0.336** | 17 | 0.450** | 31 | 0.470** | 45 | 0.080// | 58 | 0.480** |
| 7 | 0.449** | 18 | 0.371** | 32 | 0.365** | 46 | 0.295** | 59 | 0.527** |
| 8 | 0.384** | 19 | 0.05// | 33 | 0.426** | 47 | 0.350** | 60 | 0.08// |
| 9 | 0.451** | 20 | 0.555** | 34 | 0.366** | 48 | 0.502** | 61 | 0.563** |
| 10 | 0.318** | 21 | 0.403** | 35 | 0.316** | 49 | 0.557** | 62 | 0.412** |
| 11 | 0.345** | 22 | 0.532** | 36 | 0.16// | 50 | 0.555** | 63 | 0.509** |
| | | 23 | 0.591** | 37 | 0.265** | 51 | 0.440** | 64 | 0.592** |
| | | 24 | 0.431** | 38 | 0.323** | 52 | 0.420** | 65 | 0.07// |
| | | 25 | 0.04// | 39 | 0.458** | | | | |

** = a statistically significant at the 0.01 level    * = a statistically significant at the 0.05 level    // = a non-statistically significant.

As shown in **Table 4**, it is observed that all the correlation coefficients between the score of each item and the overall score of the dimension to which it belongs were statistically significant at a value less than (0.01). Items No. (1, 13, 19, 25, 29, 36, 45, 57, 60, 65) were insignificant, and hence excluded. This indicates that the scale enjoys good constructive

validity in light of its internal consistency. Accordingly, it can be said that the psychological resilience scale among universities students has a good constructive validity in view of internal consistency. **Table 5** shows the excluded and the final items in each dimension of the psychological resilience scale.

**Table 5:** Shows the dimension, omitted items, and the number of final items in each dimension of Psychological Resilience Scale.

| Dimension | Total of items | Number of items deleted | Number of final items |
|---|---|---|---|
| Optimism | 11 | 1 | 10 |
| Emotions | 14 | 3 | 11 |
| Social Relations | 14 | 2 | 12 |
| Mental | 13 | 1 | 12 |
| self-efficiency | 13 | 3 | 10 |
| Total | 65 | 10 | 55 |

**2.2. Scale Reliability**:

Reliability is one of the important characteristics in psychological measurement. After confirming the validity of the scale, it must be followed by a step to verify its reliability. The valid scale is usually characterized by reliability. To find out the psychological resilience scale reliability, the following methods are used in this study:

**Reliability Using the Alpha-Cronbach Coefficient Method**

The psychological resilience scale reliability was calculated, using the Cronbach alpha coefficient. Reliability values ranging between (0.64) & (0.71), for the dimensions were obtained. A total reliability value of the scale of (0.72) was also obtained, which are high coefficients as illustrated in **Table 6**.

**Table 6:** Shows the alpha-Cronbach reliability coefficient of the psychological resilience scale.

| Dimension | Number of items | Reliability Value |
|---|---|---|
| Optimism | 10 | 0.64 |
| Emotions | 11 | 0.69 |
| Social Relations | 12 | 0.68 |
| Mental | 12 | 0.70 |
| self-efficiency | 10 | 0.71 |
| Psychological Resilience | 55 | 0.72 |

As illustrated in **Table 6**, it is observed that Cronbach's alpha reliability coefficient for the scale as a whole was (0.72), while the values of alpha-Cronbach's reliability coefficient for the scale dimensions ranged between (0.64 - 0.71). It is noted that the most reliable dimension is the fifth dimension (self-efficacy), scoring a value of (0.71), followed by the fourth dimension (mental) with a reliable coefficient value of (0.70). Then dimension of (emotions) scored a reliability coefficient value of (0.69), followed by the third dimension with a value of (0.68). The least reliable dimension was (optimism), scoring a reliability coefficient value of (0.64). These Cronbach's alpha coefficients are good and acceptable indicators, supporting the idea that psychological resilience scale among universities students has good reliability.

**Scoring Procedure for Scale of the Psychological Resilience**

The scale of the psychological resilience in its final form included (55) items, including positive and negative items. The items of psychological resilience was divided into five dimensions: the dimension of the optimism and includes items from the (1-10), after emotions and includes items from (11-21), and after social relations and includes items From (22-33), and the mental dimension and includes items from (34-45), and after self-efficacy and includes items from (46-55), and each items has five alternatives to answer, each student must give only one answer for each items, and to correct the scale five were identified Weights from (1:5) for the positive scale items and (5:1) for the negative scale items, then the score of each item is collected to calculate the total score for each student, and after verifying the validity and the reliability of the psychological resilience scale, the scale became valid for application to the environment.

**Procedure of Data Collection**

Having completed the procedural steps previously reviewed, and having ensured study tools validity and

reliability, a field visit official letter was issued by college deanship to the researcher for visiting universities to put the tools into application. Psychological resilience scale was applied on a sample of (1060) male and female students from public universities in the Republic of Yemen. The entire process was carried out by the researcher in order to clarify the purpose and importance of study, and to answer students' inquiries on some scale- related items. Students were instructed that the data is confidential, and were asked to cooperate and answer all items fully and honestly. Upon completion, scales were collected and reviewed to ensure that all items were answered, and all study variables represented in (gender, specialization, academic level) were noted.

**Interpretation and Discussion of Results**

Hypothesis No. 1: "There is no statistical significant difference between a real mean and assumed mean in the level of psychological resilience among Yemen Universities students." For testing the hypothesis validity, the researcher used the t-test for one sample to test the difference between a real mean and assumed mean for each psychological resilience dimension and the overall measurement score **Table 7**.

As shown in **Table 7** and **Fig. 3** above, it is observed that mental dimension scored the highest with (44.52) Real mean. Emotions dimension was the least with a real mean of (35.8) in psychological resilience scale in line with dimensions. Psychological resilience among universities' students overall score was high at (196. 27) real mean, compared to the assumed mean with (165). The findings indicate that the level of psychological resilience among universities students was high. This is a good indicator calling for optimism and helping in predicting the psychological and social aspects of universities students who will be the leaders of tomorrow. This is attributed to repeated hard stressful conditions experienced by universities students. Dealing with such frequent hardships enable students

to positively encounter and overcome these difficulties in such a way that makes students more adaptive to

any hardship as any transient daily life happening.

**Table 7:** showing the t-test for one sample to test the difference between a real mean and assumed mean.

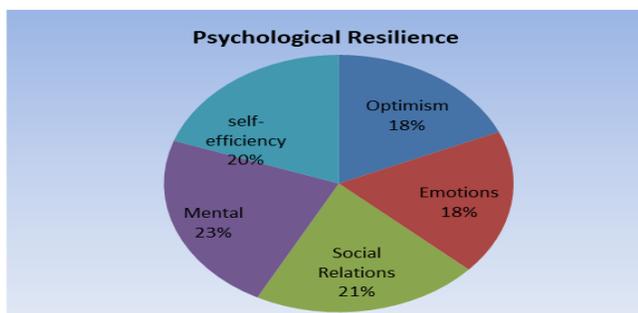| Dimension | Sample | Real Mean | Assumed Mean | Std. Deviation | df. | t. | Sig. |
|---|---|---|---|---|---|---|---|
| Optimism | 1060 | 36.17 | 30 | 4.59 | 1059 | 43.77 | 0.00 |
| Emotions | 1060 | 35.80 | 33 | 5.09 | 1059 | 17.84 | 0.00 |
| Social Relations | 1060 | 41.32 | 36 | 5.45 | 1059 | 31.78 | 0.00 |
| Mental | 1060 | 44.52 | 36 | 5.28 | 1059 | 52.59 | 0.00 |
| self-efficiency | 1060 | 38.47 | 30 | 5.28 | 1059 | 52.21 | 0.00 |
| Psychological Resilience | 1060 | 196.27 | 165 | 19.097 | 1059 | 53.31 | 0.00 |



**Fig. 3:** Illustrating psychological resilience among universities students based on dimensions.

The high psychological resilience level among universities students is more likely attributed to war, life hardships, crisis and traumas experienced by students of universities in the past five years, making students more adaptive, more adjusted and more capable of dealing with all such difficulties. This particular finding of the study has proved that universities students are capable of facing new challenges and problems and of creating suitable solutions to overcome all difficulties in such a way that turns the course of actions to the best interest of the student as if he has never experienced any hardship at all. This becomes more evident especially when students exhibit more self-competence, making them more willing to take more risks, challenge and have more resilience needed to overcome all problems and challenges.

The mental dimension is considered to be the first dimension among the psychological resilience dimensions as it obtained an average of (44.52). This is a normal result because the pressures and crises that students are going through make them to think positively to confront them. This was proved by Richardson's theory that the biological and psychological balance allows the adaptation of the body, mind and spirit to the life. The theory shows the ability of psychological resilience as a model for

dealing effectively with the pressures and negative events that the individual is exposed to and maintaining his/her balance. The dimension of social relations ranked second among the dimensions of the psychological resilience scale among universities students with an average of (41.32). It provides university students with the feelings of reassurance, safety, happiness and psychological comfort that lead to a healthy and psychologically balanced personality.

The third dimension among the dimensions of the psychological resilience scale among universities students is self-efficacy with an arithmetic average of (38.47). This means that the awareness of individual of his abilities and their effectiveness in facing life events in a positive way. The individual's awareness of his self-efficacy affects the pattern of his behavior, thoughts and emotions. The fourth dimension among the dimensions of the psychological resilience scale among universities students is the optimism dimension with an arithmetic average of (36.17). Many studies prove that optimism is positively related to the individual's ability to the perceive, confront and control stress.

The dimension of emotions ranked the last among the dimensions of psychological resilience scale among universities students with an arithmetic average of (35.80). This proves that the universities students possess an emotional balance that enables them to control their emotions and adapt to the difficulties and stressful situations they face in their lives. So they do not get confused or collapse due to the pressures or difficulties facing them. Further, universities students have become capable of developing a stronger character with sharper academic thinking skills and better interaction with student activities. Besides, universities students have the sufficient understanding and

knowledge, the ability to make use of the available alternatives and the needed ability to think positively from different angles which in turn helped in the enhancing students' psychological resilience for over-coming all challenges successfully.

The findings of this Research come in agreement with those of others studies including Al-Musawa, (2016), Shaqoura, (2012), Al-Zuhairi, (2012), and Al-Ghazal, (2008) all of which concluded that psychological resilience among universities students was really high. Hypothesis No. 2: "Universities students' responses average on the psychological resilience scale ascribed to the gender variable (males, females) have no statistically significant differences. To validate the hypothesis and to identify difference significant based on gender variable, T test independent samples were used as illustrated in Table (8) below:

**Table 8:** Showing (t) test independent samples results for measuring psychological resilience based on gender.

| Dimension | Gender | Sample | Real Mean | Std. Deviation | t. | df. | Sig. |
|---|---|---|---|---|---|---|---|
| Optimism | Male | 591 | 36.37 | 4.47 | 1.61 | 1058 | 0.11 |
| | Female | 469 | 35.91 | 4.71 | | | |
| Emotions | Male | 591 | 37.04 | 4.97 | 9.36 | 1058 | 0.00 |
| | Female | 469 | 34.21 | 4.80 | | | |
| Social Relations | Male | 591 | 41.93 | 5.43 | 4.14 | 1058 | 0.00 |
| | Female | 469 | 40.55 | 5.39 | | | |
| Mental | Male | 591 | 45.29 | 5.20 | 5.39 | 1058 | 0.00 |
| | Female | 469 | 43.55 | 5.22 | | | |
| self-efficiency | Male | 591 | 38.75 | 5.09 | 1.93 | 1058 | 0.06 |
| | Female | 469 | 38.12 | 5.50 | | | |
| Psychological Resilience | Male | 591 | 199.39 | 18.83 | 6.06 | 1058 | 0.00 |
| | Female | 469 | 192.35 | 18.72 | | | |
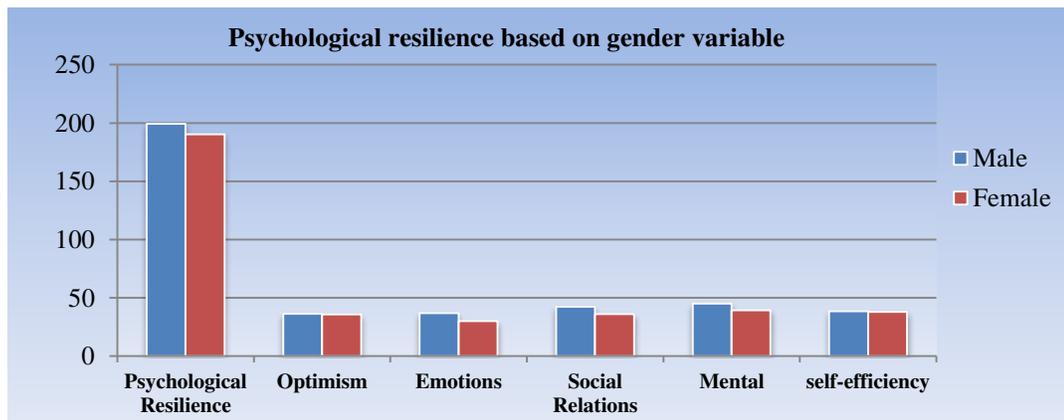


**Fig. 4:** Illustrating psychological resilience among universities students based on gender variable.

From **Table 8** and **Fig. 4** above, it is noticed reflec-ted statistically significant differences at (0.01) in male and female mean score in emotion dimension (9.36), social relations dimension (4.14), and mental dimension (5.39). Psychological resilience overall score was (6.06). The differences were in favor of male students. There were no significant statistical differences with references to optimism dimension (1.61), self-efficiency dimension (1.93) among uni-versities students. The absence of difference among male and female students in (optimism and self-efficiency) can be attributed to the fact that, upon embarking on the university life and social life arena

female students seek change and start reconsidering social and political values underestimating female abilities. Studies in psychological resilience have proved that change and adjustment are always the possible for males and females in various age and the older a person becomes the more change and the adjustment he/she has (Graber *et al*, 2015).

With regard to the existing differences among male and female university students in (emotional, social relations, mental) dimensions and the overall score of psychological dimensions, the result is logical. This is ascribed to the fact that male students are more

capable of facing life risks than females because of the male student life style. Male students exhibit the ability to maintain psychological build in facing dangers and challenges through higher psychological resilience they enjoy. In addition, they have the ability to cope with frustration. Moreover, they have the needed social and emotional skills to deal with and overcome pressures and the ensuing negative outcomes. Male students differ from female ones in dealing with the problems they encounter. The differences may be attributed to the fact that female are easily influenced by emotion in their perception of events which in turn is reflected in their behavior. In contrast, males are guided more by mind and logic and hence their actions are the result of a mental cognition. The present Research findings come in agreement with those of Al-Sheikh, (2017) and Shaqoura, (2012)

in that there are statistically significant differences in psychological resilience measurement based on gender variable in favor of male students. Like Al Shuwail and Nasr, (2012), this study reveals that there are statistically significant differences in the positive psychological resilience increase and decrease based on gender variable in favor of male students.

Hypothesis No. 3: "There are no statistically significant differences in the average responses of universities students on psychological resilience scale ascribed to specialization variable (Science – Humanity)". For ensuring the hypothesis validity and identifying difference significance based on specialization variable, Independent-Samples (t) test was used as illustrated in Table (9) below.

**Table 9:** Showing Independent-Samples T Test results of psychological resilience difference measurements based on specialization variable.

| Dimension | Major | Sample | Real Mean | Std. Deviation | t. | df. | Sig. |
|---|---|---|---|---|---|---|---|
| Optimism | Science | 381 | 36.28 | 5.06 | 0.60 | 1058 | 0.55 |
| | Humanity | 679 | 36.10 | 4.30 | | | |
| Emotions | Science | 381 | 35.63 | 5.06 | 0.77 | 1058 | 0.44 |
| | Humanity | 679 | 35.88 | 5.11 | | | |
| Social Relations | Science | 381 | 41.18 | 5.50 | 0.65 | 1058 | 0.51 |
| | Humanity | 679 | 41.40 | 5.42 | | | |
| Mental | Science | 381 | 44.74 | 5.46 | 0.98 | 1058 | 0.33 |
| | Humanity | 679 | 44.41 | 5.17 | | | |
| self-efficiency | Science | 381 | 38.90 | 5.30 | 0.99 | 1058 | 0.28 |
| | Humanity | 679 | 38.43 | 5.26 | | | |
| Psychological Resilience | Science | 381 | 196.72 | 19.84 | 0.57 | 1058 | 0.57 |
| | Humanity | 679 | 196.02 | 18.68 | | | |
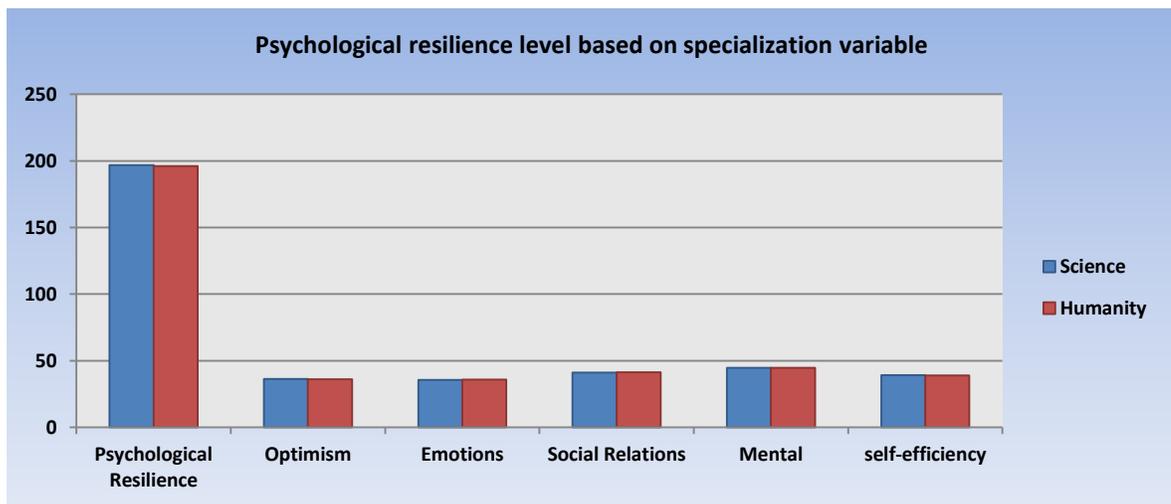


**Fig. 5:** Illustrating psychological resilience level among universities students based on specialization variable.

As illustrated in **Table 9** and **Fig. 5** above, it is observed there are no statistically significant differences in the level of psychological resilience. The t value was at (0.57) which is insignificant, being greater than the value at (0.05) among universities students in both science and humanities specializations with reference to psychological resilience level and dimensions. The absence of statistically significant differences in all dimensions of (optimism, emotions, social relations, mental aspect and self-efficiency) and in the overall psychological resilience score is ascribed to the fact that the university environment in which male and female students find themselves is almost the same. Besides, male and female students experience the same conditions, share the same study and assignment burdens, regardless of the specialization/major of the students. Students with higher psychological resilience are unique in the sense that they attend classes, participate actively in discussions, answer questions of their instructors, have no hesitation to inquire about ambiguous information and prepare well for exams without fear. All these qualities almost apply to the study sample in both science and humanities specializations. This explains the absence of any differences among male and female students.

Providing universities students with the freedom of opting for the desired specializations on their own has enhanced their sense of self-efficiency as a starting point for a new life full of a lot of hardships. As a result, students develop a sense of real optimism for a promising future and so they take life positively with the hope of a better tomorrow. This is justified by the fact that there is nothing difficult as long as it can be overcome. The researcher also attributes this result to the fact that the previous specialization of the university (the secondary stage) for most of the sample members was the same (the scientific section). This is due to the fact that most students join the scientific specialization in the secondary school stage. Like the findings of this Research, Al-Sheikh, (2017), Youssef, (2014) and Al-Zuhairi, (2012), the present study arrived at the finding that there are no statistically significant differences in psychological resilience ascribed to major of study.

Hypothesis No. 4: on psychological resilience scale ascribed to level variable (first, Second, Third, Fourth). Universities student's average responses have no statistically significant differences. A 'One-Way ANOVA' test was used to test the validity of the hypothesis and identify the difference significance. **Table 10** is an illustration.

**Table 10:** Showing 'One-Way ANOVA' test results of psychological resilience level differences on level of study.

| ANOVA | | | | | | |
|---|---|---|---|---|---|---|
| Dimension | | Sum of Squares | Df | Mean Square | F | Sig. |
| Optimism | Between Groups | 65.884 | 3 | 21.96 | 1.05 | 0.37 |
| | Within Groups | 22200.224 | 1056 | 21.02 | | |
| | Total | 22266.108 | 1059 | | | |
| Emotions | Between Groups | 64.714 | 3 | 21.57 | 0.83 | 0.48 |
| | Within Groups | 27396.791 | 1056 | 25.94 | | |
| | Total | 27461.506 | 1059 | | | |
| Social Relations | Between Groups | 32.982 | 3 | 10.99 | 0.37 | 0.78 |
| | Within Groups | 31436.319 | 1056 | 29.77 | | |
| | Total | 31469.301 | 1059 | | | |
| Mental | Between Groups | 176.975 | 3 | 58.99 | 2.13 | 0.09 |
| | Within Groups | 29303.435 | 1056 | 27.75 | | |
| | Total | 29480.410 | 1059 | | | |
| self-efficiency | Between Groups | 167.289 | 3 | 55.76 | 2.03 | 0.12 |
| | Within Groups | 29392.862 | 1056 | 27.83 | | |
| | Total | 29560.151 | 1059 | | | |
| Psychological Resilience | Between Groups | 362.268 | 3 | 120.76 | 0.33 | 0.80 |
| | Within Groups | 385851.939 | 1056 | 365.39 | | |
| | Total | 386214.207 | 1059 | | | |

As shown in Table (10) above, it is observed that there are no statistically significant differences at (0.05) among universities students in the psychological resi-

lience level and its sub-dimensions based on study level. The value was (1.05) with optimism dimension, (0.83) with dimension of emotions, (0.37) with dimen-

sion of social relations, (2.13) with mental dimension, (2.03) with dimension of self-efficiency and (0.33) in terms of overall mean score. The absence of differences among universities students in psychological resilience level based on level of study is ascribed to frequent repeated hard times and traumatic events experienced by the whole nation including universities students. Such experience has generated a higher level of adjustment and ability within students to face real life no matter how bitter or painful, solve problems, realize goals and accept criticism and other opinion. Students dealt with events almost in the same manner and hence overcame challenges, actualized their goals, looked positively at such challenges and took them as opportunities to boost their self-efficiency and develop more capability of more future risks. As a result, such hardships have not impacted students' psychological resilience throughout their four years of study at university, confirming Abu Halawa's finding that "resilience is an indicator of the individual's ability to interact with his/ her environment. The environmental circumstances create preventive elements in individuals against traumas and ensuing negative impacts (Abu Halawa, 2013). Like the findings of this Research, Al-Musawa, (2016) and Al-Zuhairi, (2012), the current study revealed that there are no differences in psychological resilience level with reference to study level variable.

**CONCLUSION AND RECOMMENDATIONS:**

The level of psychological resilience among universities students in relation to the total score of the scale is high. The results indicated that there were statistically significant differences between the average scores of males and the average scores of females in the level of psychological resilience in favor of males, and There were no statistically significant differences between the average scores of males and those of females in the dimensions of the self-efficacy, optimism on the psychological resilience scale. The results indicated that there were no statistically significant differences in the level of psychological resilience between students of scientific and humanitarian specializations among universities students. The results indicated that there were no statistically significant differences in the level of psychological resilience among students of level of study (first, second, third,

fourth) on the psychological resilience scale and its dimensions for universities students.

Based on the findings of the current research, the researcher recommends the following:

1) Psychological and social support should be provided to universities students through specialized guidance and educational programs to raise the level of psychological resilience, which may contribute to creating a balanced personality capable of adapting to stressful life conditions by the Ministry of Higher Education.
2) A positive psychology should be adopted in all universities disciplines in order to develop the positive aspects of students' personality by the Ministry of Higher Education.
3) Seminars and workshops should be held in universities to the raise students' awareness of the importance of building a positive personality for a bright future for students, because they will have the responsibility to build the new society by the universities.
4) Financial support should be provided to students from various sources to overcome the problem of fees, textbooks, and others, which constitute an obstacle to students and affect their psychological adjustment by the Ministry of Higher Education.
5) The role of University Theater should be activated in forming a positive image of psychological counseling centers, as there is a prevailing societal view that looks at everyone who visits such places with a look of shame and disgrace by the Ministry of Higher Education.

**CONFLICTS OF INTEREST:**

No conflicts of interest are related to this work.

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