

# Psychological Stress and Its Relation to Academic Achievement Motivation among Married Students at University

<sup>1</sup>Bushra Nouredine Ghafoor

## **Abstract**

*To facilitate life, man is thinking about finding and creating things that are unavailable before. There are thousands of examples surrounding us that demonstrate this fact. Psychological stress is a general condition having various rates in each individual within the environment in which they live. It is one of the psychological problems faced by female students, beginning from the primary to the higher levels of education. The motives are among the psychological themes that aroused the attention of many psychologists and academics. This is attributed to that they form the significant basics to study human behavior and the reasons behind it. Concerning the objectives, this research aims at defining:*

- 1. The level of psychological stress among married students at university.*
- 2. The level of academic achievement motivation among married students at university.*
- 3. The statistically significant differences in relation to psychological stress and academic achievement motivation according to the gender variable.*
- 4. The relationship between psychological stress level and academic achievement motivation among married students at university.*

*This study is organized into four sections. Section one presents a general framework of research, such as problem, significance, objectives, limitations and definition of terms. The second section reviews the theoretical framework and the previous studies. Moreover, section three deals with research procedures through identifying research community and sample which included (100) students selected from specific colleges of Kirkuk University including: nursing, education, medicine and sciences, which were chosen randomly. Research instruments consisted of validity, reliability, the final application and statistical methods. Finally, section four discusses findings, conclusions, recommendations and suggestions. The results were as follows:*

- 1. Married students at university have psychological stress.*
- 2. Low level of academic achievement motivation among married students because of the psychological stressors and many responsibilities they have in order to live and upbringing children.*
- 3. There are statistically significant differences in psychological stress and academic achievement motivation according to the gender variable.*
- 4. There is a strong relationship between psychological stress and academic achievement motivation, i.e., the greater the respondents' psychological pressure, the lower their level of motivation for academic achievement.*

---

<sup>1</sup> Nursing Department, Kirkuk Technical Institute, Northern Technical University, Kirkuk, Iraq

**Keywords:** *Psychological Stress, Married Students, Academic Achievement*

## **I. Introduction**

### **Research Problem**

Stress is a psychological problem faced by married students at university in different levels of their lives, beginning from the primary till the higher levels of education. This is because stress emerges from an imbalance in the essential requirements that the student seeks to achieve. In the course of life, the individual is exposed to a series of stressors represented by problems or difficulties faced by him/her that obstruct their advance; therefore, they have to be solved and removed. Problems or challenges may appear suddenly or may be preceded by warning signs. They may also be simple or complex and may be occasional or frequent (Sadiq, 1990, p. 327).

As social beings, people may have some genetic issues and grow up within a specific natural environment and social context. Thus, they have to balance their life in accordance with what is so-called in psychology “adaptation”. The internal factors, namely, those factors or conditions found inside a human, and the external factors, i.e., environmental, social and natural factors, are considerably governing humans’ ability to achieve adaptation and then psychological health. However, a human may not be able in every moment of life to keep equilibrium and make the adaptation. Hence, experiencing psychological stress leads to psychological injuries. The more complicated psychological life has effects on human life, their performance levels and psychological stability. Particularly, traumatic events experienced by the individual lead to some responses that are far from correct social behavior (Radhwan, 2007, p. 279).

In this sense, the study attempts to define the levels of psychological stress among university students. The necessity of studying such an issue among university students is vital because students’ suffering from psychological stress could lead to many problems and psychological conflicts, inappropriate adaptation to study and impede and obstruct their study course. In fact, this highlights the problem of this study that students' increased psychological stress leads eventually to discomfort and psychological discouragement, which in turn affects their study course and ability to study and complete their duties correctly. Married students are suffering from economic and social problems, and these problems are adversely affecting their academic achievement level.

### **Research Significance**

Murray believes that stress is associated with people or topics that have direct significances related to an individual’s attempts to satisfy his/her needs. Murray does not consider stress as an individual’s experience, but it signifies its strength and importance in life (Hindawi, 1990, p. 13-14). An individual may find several possibilities to handling imposed by the nature of stressors facing him/her, whether s/he can do something about the causes of stress or cannot, or can consult someone to solve the problem (Musa, 1990, p. 14). Some academics have found that the psychological stress suffered by students during their study course may be due to the environmental stressors including increasing numbers of students in the classroom, high or low temperature, poor lighting and ventilation as well as poor housing. On the other hand, it could be due to psycho-social stressors represented by poor family relations and the conflict of generations. Also, students’ psychological stress can be a result of personal stressors and others (al-Safasfah, Mohammed, 2005, p. 187).

Henry Murray (1983) defines achievement needs as a means to overcome difficulties and to exercise power and seek to do something difficult as easy and quick as possible, to achieve high levels and be superior to others and increase the self-esteem by successful practice (Murray, 1983, p. 136). Davidoff opines that there is a strong relationship between achievement motivation and behavior motivation. Achievement motivation is the desire to succeed and is related to an

educational process that helps in the learning process and serves as an incentive to work (al-Hmondi, 2005, p. 6). As for Nasr Allah, the achievement motivation refers to incentive to effort and diligence in asking for certain objective, whereby an individual or student persists in achieving that objective with determination till achieving what s/he seeks to accomplish with special attention (Nasr Allah, 2004, p. 16). Doi's (1985) study revealed a substantial positive relationship between achievement motivation that is associated with belonging and both achievement and public activity. However, the same dimension has a negative relationship with the lack of cooperation or assistance. On the other hand, the second dimension of achievement motivation that is not related to belonging is associated with: depression, neurotic, lack of cooperation, and is associated negatively with development. The results of this study indicate that in general, the relationship between achievement motivation and personality may depend on cultural factors (al-Hamdani, 2005, p. 26 -27). Research significance lies in that raising human based on good upbringing is the fundamental basis for establishing a cohesive society as a human is the main entity of society and is the main focus of development. The significance of current research also lies in seeking for stressors suffered by married students because they have other responsibilities, such as economic, social and psychological responsibilities; besides, they study at the University. This requires real coordination and knowledge of achievement motivation level among married students. The lecturer can recognize the academic achievement levels of all students based on adaptation to his/her method of teaching and each student's condition. Accordingly, this research investigates the relationship between psychological stressors and academic achievement motivation among married students at university.

### **Research Objectives**

The current research aims to identify:

1. The level of psychological stress among married students at university.
2. The level of academic achievement motivation among married students at university.
3. Significance of statistical differences in relation to psychological stress and academic achievement motivation according to gender variable.
4. The relationship between psychological stress level and academic achievement motivation among married students at university.

### **Research Limitations**

The current research is limited to university students (married) selected from colleges of Kirkuk University including nursing, education, medicine and sciences during the academic year 2018-2019.

### **Definition of Terms**

First: psychological stress is defined by:

1. Ratib (2000): the apparent imbalance between requirements (physical or psychological) and the ability to respond under circumstances when failure to respond to these requirements represents important results (p. 23).
2. Martin (2000): the condition resulted from individuals' awareness of life's demands whose achievement exceeds their energy and limits of capacity, forming a threat to their being (p. 100).

### **Conceptual Definition**

The researcher adopted Mulla Tahir's (1995) measurement of psychological stress defined as: what is perceived by university student as burden, danger or a threat and the results of changes, actions or ambiguity in the surrounding

environment which transforms his/her condition from stability and balance to disorder making him/her suffer from stress, worry and feel uncomfortable (p. 7).

**Operational Definition:** is the total score obtained by the respondent on the stress measurement designed for this purpose.

1. Rabi'a (2004) any performance made by the student in various academic subjects which can be subject to measurement by test scores and teachers' assessment or both (p. 148).

2. Al-Hamdani (2005): the amount of desire and a tendency toward the effort to perform academic duties and tasks properly (p. 148).

**Theoretical Definition:** since al-Anzi's (2001) measurement of academic achievement motivation was employed in this research, the researcher adopted his definition, which refers to the process of a tendency toward performing academic tasks properly.

**Operational Definition:** refers to the total score obtained by married students through their responses to items of academic achievement motivation measurement in the current research designed for this purpose.

## II. Theoretical Framework

### Psychological Stress

Psychological stress is a concept borrowed from physics referring to the excessive pressure on a specific substance. In biology, this concept, at the same time, denotes the aggression that is applied to the body (stress factors) and the body's reaction to aggression. This reaction is not specific, i.e., it is not related to the aggressor or stressor. In psychology, stress is used to recall multiple difficulties (stress actions, or also known as biological actions) that cannot be faced by an individual in life (Rolan and Barrow, 1996, p. 1029). Stress is a human phenomenon that is imposed on the human at different times and positions. This phenomenon usually requires adjustment to the environment. It resembles most of the other psychological phenomena, such as anxiety, conflict, frustration and aggression ...etc. It is related to the nature of human and thus it is inevitable because that means a lack of individual's activities, inadequate efficiency and failure in life (Ishmael, 2004, p. 23). As with most types of mental disorders suffered by an individual, psychological stress obstructs adaptation to self and society because of having an external and internal effect on daily life. This may result in an inability to make the appropriate response to the situation. This, in turn, is accompanied by physiological, emotional disorders that have negative effect on one or more aspects of life. The severity of psychological stress varies from one individual to another and may be severer as the individual may lose the ability to equilibrium in the psychological and physical-behavioral domain (al-Bibi et al., 2006, Internet). Individual's sense of extreme psychological stress may lead to an individual's imbalance and non-adaptation so that individual's behavior is changed, and this is called stress. Stress refers to psychological tension caused by external or internal factors imposed on the individual which creates imbalance and disorder in behavior. There are various sources for stress, most of them are attributed to external environmental variables, such as divorce, death and financial loss, migration, travel, unemployment ...etc., others are attributed to internal variables, such as psychological conflict, excessive ambition and competition and individual's lifestyle (Abdullah, 2001).

## **Human Response to Stressors**

The internal or external stressors are considered as stimuli that human must respond to them in different ways depending on their properties on the one hand and the nature and intensity of stressors on the other hand. Responses can be divided into:

1. **Voluntary Responses:** They refer to the reactions that are realized by an individual who reacts to them, such as response to a high temperature by wearing fewer clothes or wearing more clothes when feeling cold.

2. **Involuntary Responses:** They refer to the reactions of some organs of the body that are hard to control like shaking when subjected to a situation that cannot be controlled or sweating due to shyness. This response can be divided into:

a) **Organic responses** like hormonal alerts and secretions of some glands and activities of sympathetic system responsible for automatic regulation of the body in terms of control over all biological involuntary organs, such as circulatory system, respiratory system, endocrine system and skin, which is active when the body is exposed to danger (external or internal stressor) and is transmitting emergency alerts through priming energies of the body for response. In addition, the parasympathetic system works in the opposite direction to the sympathetic by slowing or deactivating some organs of the body (Zahran, 1980, p. 102).

b) **Psychological responses** refer to all responses that control or is controlled by the individual in a particular situation. They represent the mental process, such as thinking about the causes of stress, as well as assessing the stress and then to know the stressors without taking any reaction.

c) **Behavioral responses** refer to the responses taken by the individual under stress. These responses can be observed. Response to stressors is not limited to human beings, but they also exist in animals. Any stress experienced by humans does not affect all body organs but some of them. Hence, some of them may be affected severely; while the other may not be altered at all (Davidoff, 1986, p. 213).

## **Causes of Psychological Stress**

It is essential to know that psychological stress has become part of life, which requires defining its causes in order to confront or lessen its severity. The main causes are:

1. Conflicts that involve social relations with others, as well as involving ethical aspects, others' needs and daily family problems.

2. Regulation experienced by the individual within the family, various groups and society where they represent sources of stress, threat, suppression of freedom and autonomy, creating many daily problems, frustrations and sources of individual freedom and identity.

3. Unpleasant, painful and sudden experience affecting the mental health of the individual.

4. Negative emotions facing individual and affecting his/her adaptation, fear and anxiety due to not understanding parents and not securing their future profession, fear of disharmony in future within the family, work and personal life.

5. Difficult economic factors, which are shown through an individual's ability to satisfy needs and the prerequisites for life due to low income and increased expenses.

6. Health factors, which are shown when an individual encounters diseases and the lack of physical potential to treat them.

7. Environmental contamination through the relationship of tensions, diseases and psychological disorders to the environmental pollution and inadequate use of pesticides and chemicals, epidemics, contaminated water and air, as well as the accumulation of waste.

8. Population factors, which are shown through population explosion, especially in the light of the water and food crises and wrong behavior ...etc.

9. Media factors, demonstrated through the sad and unpleasant news as well as numerous media investigations broadcasted via various satellite channels about disasters, wars, oppression, violence, terrorism, murder, robbery and double-scale when dealing with people.

10. Despair and acquired inability caused by weakness of religious and moral values, emphasizing individual's inability, passivity and give up instead of making their best effort to control their environment and achieve needs and satisfy ambitions realistically.

11. Process of encountering stress may be another source of stress, especially among teenagers, as they may adopt strategies to cope with stress, leading them to other stressful situations and in turn increase their psychological stress. Accordingly, the teenager may choose to escape from stressors using drugs, avoidance or transformation, tension or behavior contradicting society's values.

12. Extremism and exaggeration when considering self and developing high expectations for it, such as excessive ambition, proficiency, perfection in life and tendency towards excessive competition, and rigidity in behavior and dealing, impatience and intolerance (as-Safasfah, 2005, p. 88-89).

### **Theoretical Trends in The Interpretation of Psychological Stress**

#### **1. Stress Theory of Hans Selye**

Selye, a doctor, specialized in hormones and studying the nerve and physiology, is a pioneer in the field of stress. He believes that everyone is exposed to a number of psychological stressors and they have the energy to be used when dealing with these stressors. He finds that an appropriate amount of stress leads to challenging individuals to do their best, and that response to stressors does not depend on the nature of the stressor and does not vary depending on its type. The response is of a general pattern of defensive reactions that work to protect and preserve the unity of human beings. He also confirms that the psychological stress is arising from how the individual assesses the stressor, and this assessment takes different forms, such as: abuse, threats and challenge (as-Safasfah, 2005, p. 190).

#### **2. Cognitive Assessment Theory of Lazarus**

Lazarus confirms that stress arises through an individual's dealing with the environment. This occurs when an individual interprets any stressor as danger or harm and threatens his/her health and safety, and he is unable to face it. Stress is defined as the relationship between the individual and the environment, realized under stress to be exhausted and beyond his/her ability to adaptation and endanger his/her existence. Lazarus believes that actions and situations could be stressors for someone. This is shown through an individual's realization of action. Lazarus clarifies that there are three components of stress, they are: 1) stressors which include person, environment and the external world; 2) responses which represent reactions to stress; and 3) the interactions between stressors and their causes (as-Safasfah, 2005, p. 191).

#### **3. Moray's Theory**

Moray considers the concepts of need and stress are essential on the basis that the concept of need is intrinsic to the behavior; while the concept of stress is related to environment or person, which may facilitate or obstruct individual's efforts to reach a particular objective. Moray distinguishes two types of stress: 1) Beta stress refers to the significance of

environmental and people themes as perceived by the individual, and 2) Alpha stress refers to the characteristics of themes and their significance as they are. Moray opines that individual behavior is associated with the first type, and emphasizes that the individual with his/her experience can associate certain subjects with particular needs. He calls this a concept of need integration. On the other hand, when there is an interaction between motive, stress and active need, this expresses the idea of alpha (Hall and Lindsey, 1970, p. 21).

#### **4. Spielberger's Theory**

This theory considers anxiety as necessary to understand stress. Spielberger has established his theory of anxiety based on the distinction between trait anxiety and state anxiety. He states that anxiety has two parts: trait anxiety or neural anxiety is a natural priming or behavioral trend that makes anxiety depending mainly on past experience; while state anxiety is objective and situational and depends on stressors. Accordingly, Spielberger associates stress with state anxiety and considers the resulting stress as a stressor causing state anxiety and excepts it to be trait anxiety. Hence, anxiety is originally an individual's personality trait. Spielberger distinguishes between the concepts of stress and anxiety. Anxiety is an emotional process referring to a sequence of cognitive behavioral responses that occur as a reaction to certain stressors. Additionally, he distinguishes the concept of stress, and the idea of threat in terms of that stress denotes differences in environmental conditions, which contain some objectivity. While threat refers to the estimation and subjective interpretation of a specific situation to be dangerous or frightening. Spielberger's theory has a special role in understanding the nature of anxiety and many studies have benefited from it, which have validated its hypotheses (Abdul Khaliq, 1985, p. 100).

#### **Academic Achievement Motivation**

##### **Theories Interpreting Academic Achievement Motivation**

Motivation is one of the psychological themes that aroused the interest of many psychologists as it forms the basics to the study of human behavior and ways behind it (Majmami, 2005, p. 2). It is difficult to address various psychological problems without attention to the motivation of human beings which play the primary role in determining behavior quantitatively and qualitatively. The study of behavior motivation increases human understanding of his/herself and others. The concept of reality as any other psychological concepts (realization, remember and learning) is a hypothetical formation evidenced through the behavior of an individual and is used to determine the direction and severity of behavior (Shaaban, 2009, p. 49). Psychologists agree that motivation is a general term used to denote the dynamic relationship between human beings and their environment. Motivation does not include any reference to a particular type of activity or a certain behavior. Psychologists cannot define the specific behavior that denotes general motivation because motivation is a general concept or hypothetical formation that does not refer to particular case, but is inferred from the behavior of human beings in various situations because human beings do not respond to similar situations in the same way (Ghalib, 1982, p. 113-114).

#### **1. Heider's Theory**

Heider has developed attribution theory in his book published in (1985) entitled (psychology of interpersonal relationships). In his book, Heider considers that our study of how human understands their society should take into consideration how the normal person understands this world as a starting point. The theory confirms that behavior is not driven by internal or external forces unless the human being intends to reach a particular objective. Consequently, intent, expectation and value become basic concepts in the cognitive method to interpret behavior (Antaki, 1982, p.6). Heider's theory is interpreted in association with the position of external, internal control. This is based on that causal attribution

is a reflection of internal control; while the personal causal attribution is a reflection of external control (al-Azirjawi, 1991, p. 58). Heider believes that event in any situation involving achievement attributed to an individual has four factors: ability, effort, the difficulty of task and luck. Heider agreed with Weiner in organizing these four factors in two dimensions:

Firstly: locus of control based on internal versus external causes. The internal causes, such as ability, effort, personality and health, are originated from the individual himself. They are relatively constant and need a great effort to be adjusted due to being associated with a person's assumptions and beliefs and a part of personality requirements. Whereas external causes like luck and others' influence and conditions of family and difficulty of task denote individuals' intervention to easily adjust them to improve the performance in the educational task. Secondly: stability includes stable (constant) versus unstable (variable). So, luck, mood and effort are variable factors because they fluctuate over time; while ability, family conditions and difficulty of the task are stable causes (As-Sa'adi, 2002, p. 17).

## **2. Theory of Raynor and Meaher (1971) (Tendency Towards Future)**

This theory denotes that individuals having superiority in academic achievement motivation become prominent in tasks that require effort, perseverance and follow up; while this is not applied to those with low achievement motivation because of their lack of tendency toward future. Raynor indicates an assumption based on stimulated motivation or acts linked to particular objectives. Thus, regular motivation in work that guides the individual signifies: (a) success and failure in the future, (b) success and failure expected for winning. Raynor has studied the relationship of achievement motivation to academic achievement from another perspective, which is the study of the achievement motivation and anxiety of the exam. When achievement motivation is stronger than the exam, the score obtained is on topics related to the future more than those who have no relation to the future. However, when achievement motivation is lower than the anxiety of the exam, the score obtained is not affected whether the topic is related to the future or not. The research results indicate that when students are aware of performance in a particular topic is important for achieving their predetermined objectives, then students with achievement motivation or success more than the motivation of anxiety of failure will obtain higher ratings than their peers who are motivated by fear of failure. Raynor and Meaher (1971) stated that individual with achievement is characterized by the following:

1. The tendency toward personal responsibility and finding solutions to the problems that face him/her as s/he neither accepts chance nor tasks involving easy success.
2. The tendency to adopt high achievement objectives and give considered lectures as his/her strategy is appropriate to his/her needs.

## **III. Literature Review**

### **1. Al-Anwar's (2003) Study (Psychological stresses encountering secondary school teachers in Al-Sharqiyah governorate)**

This study aimed at investigating psychological stresses suffered by teachers and their relationship to personal factors including emotional stability, control, knowledge, and identifying the differences according to gender, length of service, major and job satisfaction. The research sample was randomly selected from secondary school teachers in Al-Sharqiyah schools represented by (165) teachers. Then, ten cases were excluded due to not responding to all items of measurement; so, the final total number of samples were (155) teachers; (102) of them were male teachers and (53) female teachers. The questionnaire was used in this study as a research instrument. Validity was measured based on internal validity. Each of the seven dimensions was associated with standard coefficients ranging from (072-082). All of them



have significance at the level (0.01). On the other hand, reliability was measured using spilt-half method. Spearman-Brown spilt-half coefficient was (0.76) and of Guttman (0.78) and Alpha coefficient (0.80). When the test was reapplied to (50) teachers within three weeks, the correlation coefficient was (0.75). Concerning the statistical means, the researcher used Spearman-Brown correlation, T-test and unilateral variance analysis. The results of the study were as follows:

- a) There is a negative correlation between scores of teacher's sense of career stress and personal factors: emotional stability, control and knowledge; and a positive correlation with sensitivity, relaxation and tension.
- b) There is a negative correlation between scores of male teacher's sense of career stress and those of female teachers and they are for females.
- c) There is a negative correlation between a teacher's sense of career stress and job satisfaction.
- d) There are significant differences between a teacher's sense of career stress according to their major, and they are in favor of teachers of theoretical material.
- e) There are significant differences between a teacher's sense of career stress according to the length of experience in favor of less experienced teachers (al-Anwar, 2003, p. 12).

## **2. Abdulhameed's (2003) Study (Psychological stress and its relationship to social support and job satisfaction among primary school teachers)**

This research aimed at studying the supportive social relationship for teachers and job stress through their satisfaction. The study was applied to a sample of (187) teachers in primary school; (97) of them were males and (90) were females. The questionnaire on job stress was employed to measure social support and job satisfaction. The researcher used the following statistical means: arithmetic mean, standard deviation, Pearson correlation coefficient and unilateral variance analysis. The results indicated that male teachers have more stress than females in relation to the exploitation of skills. However, the total score of job stress showed no differences between them. In addition, the study found a negative correlation between job stress and teacher's job satisfaction in terms of gender. Hence, females were more satisfied than teachers and years of experience are also positively associated with teacher's job satisfaction. Concerning social support, it does not lessen job stress except for financial support and teacher's family assistance (Abdulhameed, 2003, p. 3).

## **3. Salim's (2000) Study (Parental treatment methods and their relationship to academic achievement motivation among female students in community colleges/ Jordan)**

The purpose of this study is to detect the level of academic achievement motivation among respondents selected from community colleges, Jordan and reveal the relationship between parental treatment methods and academic achievement motivation. The sample consisted of (284) students randomly selected from humanitarian and scientific community colleges of Irbid and Ajloun. The researcher has developed a measurement of academic achievement motivation which consisted of (44) items. The external validity of measurement and discrimination index of its items has been proved. Regarding reliability, it was tested using retest and equation of Pearson and found to be (0.78). Cronbach Alpha coefficient as an indicator of internal consistency was (0.79). Research data were analyzed using Pearson correlation, T-test and multiple regression equation as statistical methods. The results showed no statistically significant differences among students' scores of achievement motivation. Also, there was a statistically significant relationship among methods of treatment by motivation though it was weak (Salem, 2000, p. c, 5).

#### 4. As-Sa'adi's (2002) Study (A comparative study of academic achievement motivation among students in private and public colleges)

This study aimed at identifying academic achievement motivation among students in private and public colleges through defining the level of academic achievement motivation among students in colleges mentioned, finding the significance of differences of achievement motivation among students in these colleges according to variables of gender, major and stage. The research sample consisted of (435) students; (243) of them are from private colleges, and (201) students from public colleges. The researcher used a measurement of academic achievement motivation. The preliminary measurement items were designed, and some of them were quoted from (al-Kinani, 1979; al-A'asar, 1983; Salem, 2000; al-Doury, 1997) and developed other items. The researcher tested the measurement validity through external validity and presented it to a group of experts. Reliability was also tested through analyzing scores of measurement using spilt-half method and found to be (0.85). The researcher used these statistical methods: **chi-squared test**, T-test and Pearson correlation coefficient (As-Sa'adi, p. 15-54).

### IV. Research Method

In order to achieve research objectives, the research community and sample has to be identified. Measurement of psychological stress and academic achievement motivation and their validity and reliability were tested and then applied to the study sample. So, the data were processed statistically to achieve research objectives. The researcher employed the descriptive approach as being proper to the nature of current research. The descriptive study aims at defining certain phenomenon characteristics or a specific situation (as-Sammak, 1986, p. 75).

#### Research Community

It consists of (284) married students selected from a number of colleges at Kirkuk University including: nursing, education, medicine and sciences, for the academic year 2018-2019 (see Table 1).

Table 1: The research community

| No. | Colleges  | Males | Females | Total |
|-----|-----------|-------|---------|-------|
| 1   | Nursing   | 30    | 47      | 75    |
| 2   | Education | 25    | 35      | 60    |
| 3   | Medicine  | 35    | 47      | 82    |
| 4   | Sciences  | 31    | 63      | 67    |
| 5   | Total     | 121   | 163     | 284   |

### Research sample

As listed in Table 2, the sample of the current study consists of (100) married students selected from a number of colleges at Kirkuk University including: nursing, education, medicine and sciences, for the academic year 2018-2019 randomly distributed according to gender variable.

Table 2: The method of selecting a research sample at all stages according to numbers and gender.

| No. | Colleges  | Departments                           | Males | Females | Total |
|-----|-----------|---------------------------------------|-------|---------|-------|
| 1   | Nursing   | Basic nursing sciences                | 3     | 2       | 5     |
|     |           | Clinical nursing sciences             | 2     | 3       | 5     |
| 2   | Education | English language                      | 3     | 2       | 5     |
|     |           | Arabic language                       | 2     | 3       | 5     |
|     |           | Turkish language                      | 3     | 2       | 5     |
|     |           | Kurdish language                      | 3     | 2       | 5     |
|     |           | Chemistry                             | 2     | 3       | 5     |
|     |           | Geography                             | 3     | 2       | 5     |
|     |           | History                               | 3     | 2       | 5     |
|     |           | Qur'an sciences and Islamic education | 3     | 2       | 5     |
| 3   | Sciences  | Physics                               | 3     | 2       | 5     |
|     |           | Chemistry                             | 3     | 2       | 5     |
|     |           | Mathematics                           | 2     | 3       | 5     |
|     |           | Geology                               | 3     | 2       | 5     |
|     |           | Biology                               | 2     | 3       | 5     |

|   |          |                                  |    |    |     |
|---|----------|----------------------------------|----|----|-----|
| 4 | Medicine | Microbiology                     | 4  | 2  | 6   |
|   |          | Pediatrics                       | 2  | 3  | 5   |
|   |          | Gynecology                       | 4  | 5  | 9   |
|   |          | Family and<br>Community Medicine | 2  | 3  | 5   |
| 5 | Total    |                                  | 53 | 47 | 100 |

### Research instruments

For the purpose of measuring the fundamental variables of the research, namely, psychological stress and academic achievement motivation among students selected from some colleges in Kirkuk city, the researcher adopted the psychological stress measurement from the study of Mullah Taher (1995). This measurement consists of (38) items. In addition, academic achievement motivation measurement was adopted from Salim's (2000) study as amended by al-Inzi (2001), consisting of (42) items. The researcher performed the following procedures to determine the measurements by proving their validity and reliability:

### Validity

Validity is one of the important characteristics of the psychometric field. The valid psychometrics is the scale that measures the required data correctly (Ibrahim, 2004, p. 99). Validity has different types including external validity, which was employed in this study as one of the methods for proving the appropriateness of items to the required data. To confirm the validity of the measurement, a draft of items (Appendix 1) represented by (38) items was presented to experts in the field of psychology (Appendix 2) to demonstrate the validity of psychological stress measurement items. the researcher collected experts' views on all items except (7, 3) for lack of percentage that determines acceptance of the item, which was nearly 62%; thus, they were omitted. Hence, the final draft of measurement consisted of (36) items on psychological stress. As outlined in Table 3, some items were amended as the researcher adopted (75%) and above as accepted percentage to include the item in measurement.

Table 3: The percentage of experts' views on psychological stress items

| Items   | Agree | Disagree | Percentage |
|---|-------|----------|------------|
| 1, 2, 8, 10, 11, 12, 14, 15, 16, 19, 20,<br>22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 34, 35,<br>36, 37, 38 | 8     | -        | 100        |
| 5, 18, 26, 29   | 7     | 1        | 87.5       |
| 4, 6, 9, 13   | 6     | 2        | 75         |
| 3, 7  | 3     | 5        | 62.5       |

Additionally, for the purpose of proving the validity of academic achievement motivation measurement, the draft of its items (see Appendix 3) was presented to experts in the field of psychology (see Appendix 2) to express their views on their appropriateness to measurement. They were (42) items. After collecting experts' opinions on the validity of items, it was found that they agreed on all of them with some amendments to certain items. This is because (75%) and above was adopted as accepted percentage to include the item in measurement (see Table 4).

Table 4: The percentage of experts' views on academic achievement motivation items.

| Items   | Agree | Disagree | Percentage |
|---|-------|----------|------------|
| 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41,42 | 8     | -        | 100        |
| 1, 5, 6, 26   | 7     | 1        | 87.5       |

### Reliability

Reliability means that the measurement gives close results whenever the same measurement is applied to the same group (Ibrahim, 2004, p. 99). Since there are more ways that can be used to calculate reliability, the researcher employed retest method which means conducting the test twice on the same group of individuals by calculating the correlation coefficient between parts I and II (Ibrahim, 2004, p. 99). The researcher applied both research instruments on (30) students. After 14 days, the researcher reapplied both measurements on the same group and under the same circumstances. This is considered to be sufficient time for calculating reliability by using retest method. When using Pearson correlation coefficient, it was found that the first and second application had reliability coefficient of psychological stress measurement about (0.72) and academic achievement motivation about (0.93) (see Table 5 and Table 6).

Table 5: Reliability coefficient of psychological stress using retest method

| Measurement          | Application | Arithmetic mean | Standard deviation | Correlation coefficient |
|----------------------|-------------|-----------------|--------------------|-------------------------|
| Psychological stress | First       | 110.46          | 13.12              | 0.72                    |
|                      | Second      | 112.96          | 13.58              |                         |

### **The Final Application of Research Measurements**

After proving validity and reliability of both measurements, they were applied to the research sample in some colleges of Kirkuk University, namely, nursing, education, sciences, management and economics, and agriculture on 2/4/2018. The number of research sample was (100) students in these colleges. The researcher clarified the way of answering both measurements. Appendices (4) and (5) were processed statistically through SPSS software.

### **Measurement Correction**

The researcher corrected respondents' answers to measurement items. As for psychological stress, these items (3-7-11-14-16-22-17) were positive and strongly stressful. So, the positive answer with (5) scores refers to strongly stressful, (4) scores indicate stressful, (3) scores represent stress, while (2) scores refer to no stress. On the other hand, the following items were negative: 1, 2, 4, 6, 8, 9, 10, 12, 13, 15, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36. Negative answers with (1) score indicate strongly stressful, (2) scores refer to stressful, (3) scores represent stress, (4) scores indicate no stress. Concerning items of academic achievement motivation, they were positive that (4) scores indicate applicable to some extent, (3) scores refer to sometimes applicable to, (2) scores represent applicable to, and (1) score indicate not applicable to.

### **Statistical Means**

1. The researcher used standard deviation, arithmetic mean and correlation coefficient as statistical means.
2. Pearson correlation coefficient was used for the reliability of psychological stress and academic achievement motivation and correlation between the two variables.

$$R = \frac{(N \sum X - Y)(\sum X)(\sum Y) - (\sum X^2) - (\sum Y^2)}{(N \sum X^2) - (\sum X)^2 (N \sum Y^2) - (\sum Y)^2}$$

Where R represents the Pearson correlation coefficient, N refers to the number of individuals, G denotes a group of individuals related to a specific variable and X, Y are values of variables.

3. Test for one sample and then test for two independent samples.

## **V. Results and Discussion**

This section presents results obtained from the current research in accordance with research objectives and discussion of these results in the light of previous studies theoretical framework as follows:

### **Objective 1: Identify the level of psychological stress among married students at university**

In order to achieve this objective, arithmetic mean and standard deviation of total scores of the sample as a whole were calculated. Then, T-test was applied to one sample to identify the significance of differences between the arithmetic mean and the theoretical mean of measurement. The statistical analysis results of data showed that arithmetic mean of respondents' scores in psychological stress measurement was (9/124) with a standard deviation of (33/21) when compared to the theoretical mean of measurement of (108) scores. When applying T-test to one sample, there were statistical differences between arithmetic mean and theoretical mean as calculated T-value was equal to (5.116), which was greater than tabulated T-value of (198/1) at a significance level of (0/05) and the degree of freedom (99) (see Table 7).

Table 7: Results of T-test for one sample to identify the significance of differences between the arithmetic mean and theoretical mean of psychological stress measurement

| Measurement          | Sample | Arithmetic mean | Standard deviation | Mean | T-value    |           | Degree of Freedom | Significance level |
|----------------------|--------|-----------------|--------------------|------|------------|-----------|-------------------|--------------------|
|                      |        |                 |                    |      | Calculated | Tabulated |                   |                    |
| Psychological stress | 100    | 8.124           | 21.32              | 108  | 5.116      | 1/98      | 99                | 0/05               |

The researcher found that married students at university suffer psychological stress. This is attributed to having works other than study and the responsibilities of living, housing, upbringing children as well as economic issues compared with unmarried students. This result agrees with the study of al-Anwar (2003) which emphasizes that married students have psychological stress.

**Objective 2: Identify the level of academic achievement motivation among married students at university**

For achieving this objective, arithmetic mean and standard deviation of total scores of the sample as a whole were calculated. Then, T-test was applied to one sample to identify the significance of differences between the arithmetic mean and the theoretical mean of measurement. The statistical analysis results of data showed that arithmetic mean of respondents' scores in academic achievement motivation measurement was (125.60) with a standard deviation of (17.47) when compared to the theoretical mean of measurement of (126) scores. When applying T-test to one sample, there were statistical differences between the arithmetic mean, and theoretical mean as calculated T-value was equal to (0.52), which was less than tabulated T-value of (1.152) at a significance level of (0.05) and the degree of freedom (99) (see Table 8).

Table 8: Results of T-test for one sample to identify the significance of differences between the arithmetic mean and theoretical mean of academic achievement motivation measurement

| Measurement                     | Sample | Arithmetic mean | Standard deviation | Mean | T-value    |           | Degree of Freedom | Significance level |
|---------------------------------|--------|-----------------|--------------------|------|------------|-----------|-------------------|--------------------|
|                                 |        |                 |                    |      | Calculated | Tabulated |                   |                    |
| Academic achievement motivation | 100    | 125.60          | 17.47              | 126  | 0.52       | 1.152     | 99                | 0/05               |

The Table above lists the level of academic achievement motivation among married students at university is low because of the stresses they have and the responsibilities of living and upbringing children. This result disagrees with the study of As-Sa'adi (2002).

**Objective 3: the significance of statistical differences between levels of psychological stress and academic achievement motivation according to gender variable**

**a. The difference between males and females for psychological stress**

In order to achieve this objective, data were processed statistically using T-test for two independent samples to identify the significance of differences for psychological stress. According to the gender variable, the number of male

students was (53), having an arithmetic mean of (130.00) with a standard deviation of (21.36). Calculated T-value was equal to (1.375), which was less than tabulated T-value of (1.98) at a significance level of (0.05) and degree of freedom (98). While females were (47), having an arithmetic mean of (124.08) with a standard deviation of (12.32) (see Table 9).

Table 9: Results of T-test for two independent samples to identify the significance of differences for psychological stress according to gender variable.

| Psychological stress | Variable | Group   | Number | Arithmetic mean | Standard deviation | T-value    |           | Degree of freedom | Significance level |
|----------------------|----------|---------|--------|-----------------|--------------------|------------|-----------|-------------------|--------------------|
|                      |          |         |        |                 |                    | Calculated | Tabulated |                   |                    |
|                      | Gender   | Males   | 53     | 130.00          | 21.36              | 1.375      | 1.98      | 98                | 0.05               |
|                      |          | females | 47     | 124.08          | 21.32              |            |           |                   |                    |

The results showed that there statistically significant differences for psychological stress according to gender variable for males. The researcher believes that married males are exposed to more stress than married females due to their responsibilities like working for a better life and study which affects them and forms psychological stress for them.

**b. The difference between males and females for academic achievement motivation**

In order to achieve this objective, data were processed statistically using T-test for two independent samples to identify the significance of differences for academic achievement motivation. According to the gender variable, the number of male students was (53), having an arithmetic mean of (128.54) with a standard deviation of (2.96). Calculated T-value was equal to (0.75), which was less than tabulated T-value of (0.98) at the significance level of (0.05) and degree of freedom (98). While females were (47), having an arithmetic mean of (125.60) with a standard deviation of (17.47) (see Table 10).

Table 10: Results of T-test for two independent samples to identify the significance of differences for academic achievement motivation according to gender variable

| Academic achievement motivation | Variable | Group   | Number | Arithmetic mean | Standard deviation | T-value    |           | Degree of freedom | Significance level |
|---------------------------------|----------|---------|--------|-----------------|--------------------|------------|-----------|-------------------|--------------------|
|                                 |          |         |        |                 |                    | Calculated | Tabulated |                   |                    |
|                                 | Gender   | Males   | 53     | 128.54          | 20.69              | 0.75       | 0.98      | 98                | 0.05               |
|                                 |          | females | 47     | 125.60          | 17.47              |            |           |                   |                    |



The results showed that there were differences between married males and females for academic achievement motivation. The researcher believes that although both genders have responsibilities for life and work that must be done adding to the burdens of study, the human has desire and more motivation toward study and care more for academic duties. According to the theory of Raynor and Meaher, achievement motivation varies according to the individual's interests and are therefore different in terms of their importance level. This result disagrees with the study of As-Sa'adi (1981).

**Objective 4: The relationship between levels of psychological stress and academic achievement motivation among married students at university**

In order to achieve this objective, data were processed statistically using the Pearson correlation coefficient to calculate the relationship between respondents' scores on psychological stress measurement and academic achievement motivation. The arithmetic mean of psychological stress was (124.08) with a standard deviation of (21.32). The correlation value was (0.88) at a significance level of (0.01). Concerning academic achievement motivation, arithmetic mean was (125.60) with a standard deviation of (17.47) (see Table 11).

Table 11: The significance of statistical differences for psychological stress and social adjustment

| Variables                       | Arithmetic mean | Standard deviation | Correlation coefficient | Significance level |
|---------------------------------|-----------------|--------------------|-------------------------|--------------------|
| Psychological stress            | 124.08          | 21.32              | 0.88                    | 0.01               |
| Academic achievement motivation | 125.60          | 17.47              |                         |                    |

The results showed a strong positive correlation between psychological stress and academic achievement motivation. In other words, the more stressful the students, the lower their level of academic achievement motivation.

## VI. Recommendations and Suggestions

### a. Recommendations

According to the results, the researcher recommends the following:

1. Motivating the married students to coordinate the working hours with study in order to organize their time, which lessens their stress.
2. Developing the educational program for lessening stress for married students.
3. Using effective strategies by lecturers to create and increase students' motivation for research and investigation.
4. Using appropriate teaching methods to motivate the student to make their best effort to study.

### b. Suggestions

The researcher suggests the following:

1. Conducting similar scientific studies at the level of institutes.

2. Conducting a study on the relationship between psychological stress and other variables such as self-realization, behavior, altruism, self-efficacy... etc.

## References

1. Ibrahim, R. (2004). Personality patterns (A-B) and their relation to neural tendencies and ability to make decision, unpublished PhD thesis, University of Baghdad.
2. Ismail, B. (2004). Life stress and psychological disorders. Anglo-Egyptian press, Cairo, Egypt.
3. Osama, K. (2000). Training of psychological skills: applications in sports, 1<sup>st</sup> ed., Cairo, Dar al-Fikr al-Arabi.
4. Al-Anwar, M. (2003). Psychological stress for the teacher, Journal of psychology, number 148. Retrieved from: [www.maganin.com](http://www.maganin.com).
5. Al-Bibi et al. Substance abuse. Arabic Journal of Humanities, Kuwait, issue 58. Retrieved from: google scholar website.
6. Doron, R. and Barrow, F. (1996). Encyclopedia of Psychology, translated by: Fouad Shahine. Uwaydat publications, Beirut.
7. Davidoff, L. (1986). Introduction to psychology, translated by: Said A. McGraw Hill publisher, Cairo, Egypt.
8. Rabi'a, H. (2008). Educational psychology, Amman, Arab community library for publishing and distribution.
9. Radhwan, S. (2007). Psychological health, al-Maseer House for publishing and press, Jordan.
10. As-Sammak, M. et al. (1986). Origins of scientific research, 2<sup>nd</sup> ed., Salahaddin University, Erbil.
11. As-Safasfah, M. (2005). Principles of Psychological health, al-Maseer House for publishing and press, Jordan.
12. Salim et al. (2000). Methods of treatment and their relationship to academic achievement motivation among students in community colleges in Jordan, unpublished PhD thesis, college of education, Mustansiriyah University.
13. As-Sa'adi, Q. (1981). Academic achievement motivation among students in community private and public colleges, unpublished master thesis, college of education, Mustansiriyah University.
14. Sha'aban, I. (2009). Concerns of high school students and their relationship to academic achievement motivation, unpublished master thesis. Tikrit University, college of education.
15. Shukri, A. (1997). Psychological stress facing teaching staff at Jordanian universities. Journal of educational and social sciences, Yemen. Retrieved from: [www.alfaa.com](http://www.alfaa.com).
16. Abdulhameed, F. (2003). Psychological stress and its relationship to social support and job satisfaction among primary schools teachers.
17. Abdulkhalik, N. (1985). Job satisfaction and its impact on productivity. Organizational behavior researches. Dar al-Qalam, Kuwait.
18. Abdulghaffar, M. (1984). The relationship among students' trends towards study and their academic achievement motivation, Journal of college of education, University of Cairo, number 6.
19. Abbas, L. (2013). Avoidance personality disorder and its relationship to academic achievement motivation among students at university. Master thesis, college of Arts, Salahaddin University.
20. Ghalib, M. (1982). Educational psychology, Beirut, Dar and library of Al-Hilal.
21. Kshkoash, I. and Mansour, T. (1979). achievement motivation and its measurement, 1<sup>st</sup> ed. Cairo, Egypt: Anglo-Egyptian Library.
22. Naser Allah, O. (2004). Low academic achievement: its causes and treatment, 1<sup>st</sup> ed., al-Awa'il House for publishing and distribution, Amman, Jordan.

23. Martin, P. (2000). *The Sickening Mind*, translated by Dr. Abdul Ali al-Jismani, Arabic House of Sciences, Beirut, Lebanon.
24. Majeed, A. (1990). Level of academic achievement motivation among female students of colleges of education at Iraqi universities, Salahaddin University, college of education (unpublished Master thesis).
25. Majmami, A. (2006). Academic achievement motivation, test anxiety and some academic variables among students at college of teachers in Jazan, al-Qura University, college of education (unpublished Master thesis).
26. Mohammed, S. (2008). Effect of psychological educational approach to relieve the accompanied psychological stress before the competitive performance for front class players in tennis, unpublished Master thesis, college of education.
27. Mohamed, M. (2004). *Educational psychology and its applications*, Amman: House of culture library for publication and distribution.
28. Mulla Tahir, S. (1995). Irrational thoughts among students at universities, their relationship to psychological stress and methods of dealing with them. Doctoral dissertation, college of education, Mustansiriya University.
29. Holl Kolindzi, C. (1970). *Personality theories*. Translated by Ahmed Marj et al., House of projects, Cairo.
30. Al-Hmawandi, A. (2005). The level of motivation and its relationship to academic achievement among high school students of Anfal operations victims who had lost their father, relatives, sons and others, Salahaddin University, Erbil, college of education of Humanities, unpublished Master thesis.
31. Al-Hindwai, A. (1990). Independence from the cognitive field and dependability on it and their relation to the treatment of psychological stress, unpublished Master thesis, college of Arts, University of Baghdad.