# СОЦИОЛОГИЧЕСКИЕ ИССЛЕДОВАНИЯ В ОБРАЗОВАНИИ

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## STRATEGIES OF COPING WITH ANGER AS A STATE AND A TRAIT AMONG FEMALE STUDENTS

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**Abstract.** Introduction. University students often encounter many difficult situations that may provoke their anger and thus make them less capable of controlling themselves and their behaviours. This will possibly hinder their growth and psychological and academic development, leading to more personal conflict and discomfort, emotional and physical abuse, increased crime, feelings of insecurity, a lack of concentration, and less social interaction.

*Aim.* This study *aims* to examine coping strategies with anger as a state and trait in light of "Social status" and "Achievement level" variables.

Methodology and research methods. A quantitative method was employed to analyse the data. The sample for the study consisted of 256 female students from Al-Balqa Applied University (BAU), randomly chosen. Two scales were used to collect data: 1) the anger scale as a state and as a trait, including 30 items (15 items measure anger as an emotional state that varies in its intensity, and 15 items measure anger as an emotional trait); 2) the anger coping strategies scale, containing 34 items divided into six domains to identify the different ways of individuals' positive or negative responses to the irritating situations of anger (direct expressions of anger, emphasis, search for social support, dissipation of anger, avoidance, and tapering).

*Results*. The results revealed statistically significant differences due to social status and achievement level, whereas there were no statistically significant differences in the coping strategies for anger due to social status. They also showed that seeking social support is the prevailing coping strategy.

*Scientific novelty.* The study is one of the few in the Arab World that looked at the relationship between anger as a state or trait and coping strategies in a sample of female students based on their social status and level of achievement. It helps enrich the theoretical literature on anger and researchers' and students' knowledge by clarifying the relationship of the discussed variables with each other.

*Practical significance.* The *practical significance* of the study can be observed in two aspects. First, the research findings can draw the attention of educational officials by highlighting the relationships between anger as a state and anger as a trait, as well as the coping strategies employed by female students. This knowledge can lead to developing programmes to reduce anger among female students. Second,

the study can contribute to developing coping methods that positively impact the social and academic adaptation of female students.

**Keywords**: anger as a state and a trait, emotional and physical abuse, Jordanian university female students, personal conflict and discomfort, strategies for coping with anger.

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### СТРАТЕГИИ СОВЛАДАНИЯ С ГНЕВОМ КАК СОСТОЯНИЕ И ЭМОЦИОНАЛЬНАЯ ЧЕРТА У СТУДЕНТОК

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Аннотация. Введение. Студенты университетов часто сталкиваются со многими трудными ситуациями, которые могут спровоцировать их гнев и, таким образом, сделать их менее способными контролировать себя и свое поведение. Это может препятствовать их росту, психологическому и академическому развитию, что приведет к большему личному конфликту и дискомфорту, эмоциональному и физическому насилию, росту преступности, чувству незащищенности, отсутствию концентрации и меньшему социальному взаимодействию.

*Цель* исследования – рассмотреть стратегии преодоления гнева как состояния и эмоциональной черты с учетом переменных «Социальный статус» и «Уровень достижений».

Методология и методы исследования. Для анализа данных был использован количественный метод. В исследовании приняли участие 256 студенток из Прикладного университета Аль-Балка (ВАU), выбранных случайным образом. Для сбора данных использовались две шкалы: 1) шкала гнева как состояния и как черты, включающая 30 пунктов (15 пунктов измеряют гнев как эмоциональное состояние, которое варьируется по своей интенсивности, а 15 пунктов – как эмоциональную черту); 2) шкала стратегий совладания с гневом, содержащая 34 пункта, разделенных на шесть доменов для определения различных способов положительной или отрицательной реакции людей на раздражающие ситуации гнева (прямое выражение гнева, акцент, поиск социальной поддержки, рассеивание, избегание и ослабление гнева).

*Результаты*. Результаты выявили статистически значимые различия в зависимости от социального статуса и уровня достижений, тогда как не было выявлено статистически значимых различий в стратегиях преодоления гнева в зависимости от социального статуса. Они также показали, что преобладающая стратегия совладания с гневом – поиск социальной поддержки.

Научная новизна. Это исследование является одним из немногих в арабском мире, в котором изучалась взаимосвязь между гневом как состоянием или чертой и стратегиями преодоления в выборке студенток в зависимости от их социального статуса и уровня достижений. Это помогает обогатить теоретическую литературу о гневе и знания исследователей и студентов, проясняя вза-имосвязь обсуждаемых переменных.

Практическая значимость. Во-первых, результаты исследования могут привлечь внимание работников системы образования, обратив внимание на взаимосвязь между гневом как состоянием и гневом как эмоциональной чертой, а также на стратегии преодоления гнева, используемые

учащимися женского пола. Эти знания могут помочь в разработке программ, направленных на уменьшение гнева среди студенток. Во-вторых, исследование может способствовать разработке методов решения проблем, которые положительно влияют на социальную и академическую адаптацию студенток.

**Ключевые слова**: гнев как состояние и черта, эмоциональное и физическое насилие, студентки иорданского университета, личностный конфликт и дискомфорт, стратегии преодоления гнева.

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# ESTRATEGIAS PARA AFRONTAR LA IRA COMO UN ESTADO Y RASGO EMOCIONAL EN LAS ESTUDIANTES UNIVERSITARIAS

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Abstracto. Introducción. Los estudiantes universitarios a menudo se enfrentan a muchas situaciones difíciles que pueden desencadenar su ira y, por lo tanto, hacerlos menos capaces de controlarse así mismos y a su comportamiento. Esto puede obstaculizar su crecimiento, desarrollo psicológico y académico, lo que genera más conflictos e incomodidad a nivel personal, abuso físico y emocional, aumento de la delincuencia, sentimientos de inseguridad, falta de concentración y menor interacción social.

*Objetivo*. El propósito del estudio es considerar estrategias para la superación de la ira como estado y rasgo emocional, teniendo en cuenta las variables "Estatus social" y "Nivel de logros".

Metodología, métodos y procesos de investigación. Se utilizó un método cuantitativo para analizar los datos. En el estudio participaron 256 estudiantes universitarias de la Universidad Aplicada Al-Balqa (BAU), seleccionadas al azar. Se utilizaron dos escalas para recopilar datos: 1) una escala de 30 ítems de ira como estado y como rasgo (15 ítems miden la ira como un estado emocional que varía en intensidad y 15 ítems miden la ira como un rasgo emocional); 2) la Escala de Estrategias de Afrontamiento de la Ira, que contiene 34 ítems divididos en seis dominios para medir las diferentes formas en que las personas reaccionan positiva o negativamente ante situaciones de ira molestas (expresión directa de la ira, énfasis, búsqueda de apoyo social, disipación, evitación y reducción de la ira).

Resultados. Los resultados revelaron diferencias estadísticamente significativas según el estatus social y el nivel de logro, mientras que no hubo diferencias estadísticamente significativas en las estrategias para afrontar la ira según el estatus social. También demostraron que la estrategia predominante para afrontar la ira es buscar apoyo social.

Novedad científica. Este estudio es uno de los pocos en el mundo árabe que examina la relación entre la ira como estado o rasgo y las estrategias de afrontamiento en una muestra de estudiantes universitarias según su estatus social y nivel de rendimiento. Esto ayuda a enriquecer la literatura teórica sobre estudio de la ira y el conocimiento de investigadores y estudiantes al aclarar las interrelaciones de las variables discutidas.

Significado práctico. En primer lugar, los hallazgos del estudio pueden atraer la atención de los profesionales de la educación al resaltar la relación entre la ira como un estado y la ira como un rasgo, así como las estrategias utilizadas por las estudiantes universitarias para afrontar la ira. Este conocimiento

puede ayudar a desarrollar programas destinados a reducir la ira entre las estudiantes universitarias. En segundo lugar, el estudio puede contribuir al desarrollo de métodos de resolución de problemas que incidan positivamente en la adaptación social y académica de las estudiantes.

**Palabras claves**: la ira como estado y rasgo, abuso emocional y físico, estudiantes universitarias jordanas, conflicto y malestar personal, estrategias para superar la ira.

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#### Introduction

Today's school and university students often encounter many difficult situations that may provoke their anger and thus make them less capable of controlling themselves and their behaviours. This may hinder their growth and their psychological and academic development. It may also result in increased personal conflict and discomfort, emotional and physical abuse, increased crime, a loss of concentration, a sense of insecurity, and a lack of social interactions [1].

Although anger is a healthy and typical human emotion, it can result in destructive behaviours and unfavourable results when it becomes overwhelming or uncontrollable. Understanding and controlling the underlying reasons and implementing practical tactics to control and express anger constructively is necessary for coping with rage. In order to manage anger, it is crucial to identify the particular circumstances, occurrences, or ideas that make people angry. Knowing what makes one angry enables him/her to anticipate and prepare for specific triggers and react more logically and productively. Additionally, self-awareness of one's bodily sensations and indicators of rage might help the individual act before it gets out of control [2].

It is important for individuals to acknowledge and identify the signs of anger in their thoughts and emotions, as well as any accompanying physical changes in their bodies, such as an increased heart rate, tense muscles, or shallow breathing. Additionally, getting some mental and emotional space from the situation when anger flares up might be beneficial. A minute to gather one's thoughts, settle down, and have a more comprehensive perspective can be found by taking a step back. One way to do this may be to physically leave the environment, psychologically distance oneself by paying attention to his/her breathing, or use a grounding method. Using relaxation methods can also aid in lowering the level of rage and encouraging calm [3].

By calming the body and shifting attention away from events or ideas that make people angry, deep breathing techniques, progressive muscle relaxation, guided imagery, or mindfulness meditation can help them control their anger. Anger frequently results from incorrect or harmful thought processes. Challenging and reframing these harmful thought patterns and replacing them with more logical

and positive ones requires cognitive restructuring. This may aid in lowering rage and encouraging more flexible reactions. Anger can occasionally result from actual issues or confrontations. Using problem-solving techniques can assist in addressing the root causes and discovering workable solutions. This entails determining the issue, developing various remedies, considering their viability, and carrying out the best action plan [4].

Instead of engaging in violent or passive-aggressive actions, it is crucial to communicate anger healthily and authoritatively. Assertive expression of one's demands and feelings while being respectful of the opinions of others takes active listening. Speaking with a dependable friend, member of a family, or a therapist may be a great help in controlling someone's anger. Sharing one's thoughts and feelings with a sympathetic listener may provide insight, affirmation, and direction for developing healthy coping mechanisms for anger [5].

Stress and anger may be effectively released via physical activity. Running, dancing, or participating in sports daily can help channel and release energy beneficially and healthily. Additionally, maintaining one's general well-being is essential for controlling rage. This entails engaging in self-care practices that encourage relaxation, such as obtaining enough sleep, eating a balanced diet, doing hobbies or other enjoyable activities, and ensuring you have enough downtime. It is crucial to remember that controlling anger is a process that calls for perseverance and effort. Experience persistent or severe problems with anger severely affect people's lives and relationships. It may be helpful to seek professional assistance, such as counselling or anger management programmes. People may learn to control their anger with time and effort, resulting in better relationships and a healthier emotional state [6].

#### **Literature Review**

Anger is one of the most basic and natural emotions that people experience from birth, and it is a natural response that occurs whenever people believe that someone is impeding or interfering with the achievement of their goals or when they believe that someone is threatening them with specific values [7, 8]. Also, anger is an emotional response toward provocative events that consists of various reactions that cause resentment, frustration, distress, and hurt individuals [9–11]. This definition confirms that anger is a response that occurs in social states and comes from individuals upon facing stressful situations, where individuals suffer from an increase in the level of physiological stimulation in these stressful situations, which they perceive as frustrating and threatening and that cause distress for them [12, 13]. Therefore, individuals' awareness of frustration with a high level of arousal may lead to anger [14].

C. D. Spielberger defined *anger* as either an emotional state of anger composed of subjective sensations such as tension, discomfort, excitement, and anger or as an anger trait defined in numerical language by the number of times a person is tested for feeling the state of anger at a specific time, with high-anger trait individuals

tending to respond to all or most situations with anger [15]. Anger is necessary for individuals to fight aggression, protect themselves and their money, and achieve themselves. At the same time, H. Lerner emphasised that anger is necessary to keep individuals in control of the obstacles that arise in their lives [16]. Anger differs according to the situation and framework in which it occurs and may appear as aggressive behaviour or as a reflection of a state of sadness or fear [17–19]. J. L. Deffenbacher stated that there are differences between individuals' reactions toward situations that generate anger, perceived the recklessness of some people, and noticed that others do not express anger in public. In contrast, people generally tend to show low tolerance for anger and frustration [20].

One of the reasons for displaying an anger reaction may be genetic or physiological factors; there is evidence that some babies get angry quickly and are sensitive, and it is easy to let them be angry from a very young age [21–25]. Anger may be due to social and cultural reasons, such as a lack of opportunity to learn to deal with the anger reaction constructively or everyone being angry at one time or another. Anger varies in its intensity from mild irritability to extreme anger. Similar to other emotions, anger is accompanied by physiological, psychological, and biological changes [26, 27]. Whenever anger gets out of control, it will be devastating and can lead to problems at work, school, personal interactions, and the total quality of an individual's life.

D. Meichenbaum pointed out that anger is often accompanied by many biological changes, such as a high heart rate, muscle tension, high blood pressure, shortness of breath, an increase in energy level due to a rise in blood flow to muscles and hormonal activities (adrenaline and noradrenaline), an increase or shrinkage of skeletal muscles, and an increase in body temperature, which all affect the biosystems of the human [28]. Various psychological changes occur during an anger reaction. Among these changes are a loss of concentration, a reduction in tolerance capability and patience, an increase in insomnia or swift movements, an increase in the feeling of stress, and a decrease in the ability to make decisions in case the anger reaction continues for a long time [29].

Anger is an emotional state characterised by emotional venting and discomfort, whereas violence and aggression represent behaviours that express anger [30]. Also, anger is an internal negative emotional state. P. Boman pointed out that anger is one of the primary emotions that gives the human being motivational capabilities to overcome difficulties or obstructions [31]. At the same time, R. W. Novaco explained that anger is an emotional state with four dimensions: physiological, emotional, behavioural, and cognitive [14]. Anger is one of the most hardened and stubborn emotional situations that people want to escape from, and it is the most seductive and influential on negative emotions because the internal monologue that induces anger and the ethically justified justifications fill the angry person's mind with convincing excuses to increase anger to the fullest extent. Anger is not like sadness because the former is an emotion that generates energy and alertness and has seduction and motivation capabilities, which may be a reason for the

shared beliefs and ideas about it in terms of its difficulty to control, the mistake of restraining inside, and using it to purify the soul. It is in the interest of an angry person. Some scholars have argued that anger can be wholly prevented [23] and is a natural human response [24]. Anyone can become enraged by an annoying or inappropriate situation, but everyone expresses their rage differently.

In the educational environment, anger may affect a student's educational achievement. Moreover, different circumstances may stimulate student anger. However, it is not convincing that feelings toward the educational process will motivate anger among students and how students express their anger, which can affect their achievement and their health [24]. Anger is a form of reaction and response for individuals to deal with threats. There are three types of anger: the first is quick and sudden to preserve oneself, and the second is cautious and deliberate, which is a reaction to the perception of intentional harm or unfair treatment by others; these two types of anger are considered forms of occasional anger, while the third is related more to personal characteristics, such as irritability, a frown, and rudeness [25].

In this perspective, J. L. Deffenbacher et al.'s study emphasised the importance of providing adolescent students at this stage with social skills that help them to express the emotion of anger and then control it and to have convincing explanations for their angry behaviours, knowing there is a situational, personal anger that must be reduced at the beginning or it will turn into a wave of harmful anger that will be directed towards the self and towards others who are surrounding them [20]. Students with high levels of anger can be helped by teaching them how to control their emotions, understand and manage their feelings, and avoid intensifying negative emotions and serious confrontations with male and female colleagues in their interactive educational environment [26, 27]. The sequence of angry ideas that fuel anger may be the key to the most potent means of alleviating the intensity of anger by putting an end to the ideas that ignite the fire of anger, and the longer it takes to find the reasons that ignited anger, the better reasons individuals fabricate and invent to justify their anger to ourselves. However, these burning fires will subside if people look at things differently [28]. However, anger is always annoying; it does not make us content, it does not make people feel well whenever they get angry, and it does not make their food taste well. Whenever individuals get angry, they do not feel rested; they cannot sleep; they do not have to shout and scream, but they are getting too angry on the inside about what happened in their office or to their family. This could be the beginning of indigestion or ulcers, or it could make them unable to sleep at night. They are having many difficulties containing and holding this anger. If they express this anger, they will look at others aggressively and violently because their presence and anger have troubled them [3]. Anger is a state of narrowness and a loss of tolerance accompanied by the desire to harm anything individuals cannot tolerate. They often become angry whenever they are exposed to things they do not like, such as when people treat them in a way that they do not want people to treat them, people do not show them deference, they do not obey their instructions at work, or they have vowed to do something at work for

them. They have not fulfilled that promise, and they get angry with other because they have not done what they expected of them [28].

Mentally healthy people may find themselves in control of their emotions and anger. They evaluate the stressful or threatened life events positively and view them as factors of growth and challenge rather than factors of frustration and anxiety, which make individuals' psychological lives free of continuous tensions and conflicts and more energetic, persistent, and enthusiastic to help them make choices and decisions, keep them away from a contradiction in their behaviours and in their way of dealing with others, and help them to understand themselves and others. Female university students are currently facing many stressful situations that affect their emotional, psychological, and physical conditions and their abilities to perform daily functions. Academic life is regarded as one of the primary causes of many psychological pressures; students must complete many academic tasks, projects, and exams and meet parental expectations, which impose many pressures on them. In addition, the economic pressures associated with daily expenses and social interaction with others are the most important reasons that make academic life for many of them irritating and expose them to many psychological and social problems [29].

Q. Sammour and M. Awahd conducted a study aiming to detect anger as a state and trait among Yarmouk University students and to identify the variables related to anger as a state and as a trait [30]. The study sample consisted of 1016 students. The results revealed that anger was a trait among university students and showed a strong correlation between anger as a state and anger as a trait. Also, they showed that the level of achievement variable explained 70% of the variation.

P. Boman examined gender differences in anger behaviour. The study sample consisted of 102 male and female students. The results showed that females were more likely to express their anger positively toward males and that males were more hostile [31]. R. Shloul examined the relationship between anger and coping strategies with optimism among a sample of 655 students at Yarmouk University. The results revealed that the avoidance strategy was the most effective in dealing with anger, while the strategy of direct expression was the least effective [32].

K. Al-Hammouri sought to identify anger-management strategies among gifted students. The study sample consisted of 407 students from Jordan and Kuwait. The results showed that talented students in Jordan and Kuwait initially used the avoidance strategy to manage their anger, while the reflection strategy came in at the end [33].

In Nigeria, S. K. Ajiboye and M. Ajokpaniovo investigated grief reactions and coping strategies among in-school adolescents who had lost a parent [34]. The study used a descriptive design to analyse the data. The sample consisted of 200 in-school adolescents. The results showed that in-school adolescents faced with parental loss had experienced a series of anguish reactions such as nervousness, tenseness, anxiety, nightmares, and shock. The adolescents faced with parental loss have shown low coping abilities. The study also revealed no significant difference in the grief reactions to coping strategies and parental loss among in-school adolescents

concerning gender. The study suggested that counsellors organise grief counselling for in-school adolescents who have lost a parent regularly. Grief therapy, which can help students cope with various grief reactions, should be organised by counsellors and other professionals who can provide it.

S. E. Munsell et al. examined how undergraduate students in the United States coped with the pandemic compared to the general adult population [35]. The sample consisted of 289 students who completed survey items related to hope, coping, and personality. The results indicated that the students employed significantly more maladaptive coping strategies than the general population upon responding to stress. Moreover, they had considerably lower levels of hope, emotional engagement, carefulness, and openness to new experiences.

#### Methods

#### **Study Sample**

The study sample consisted of 256 female students from Irbid University College selected by the conventional method, including 128 married female students and 128 unmarried female students.

#### **Study Instrument**

This study used two measurement tools: the anger scale as a state and trait and the second was a revised version of the coping with anger scale developed by A. C. Miers et al. [36]. A description of each scale and the procedures used to verify its validity and reliability are discussed below.

#### First: The Anger Scale as a State and a Trait

The anger scale as a state and as a trait proposed by C. D. Spielberger et al. [15] was translated into Arabic by M. Abdul Rahman and F. Abdul Hamid [37] and is used in the current study. The scale consisted of 30 items, of which 15 measured anger as an emotional state that varies in intensity from time to time and 15 as an emotional trait.

#### Validity of the Anger Scale as a State and as a Trait

C. D. Spielberger et al. verified the validity of the scale in its original form by implementing it on a large sample of high school and university students and military service workers and conducting a construct validity study, where the correlation coefficient between individuals' degrees was calculated on the anger scale as a state and as a trait and their degrees on the hostility, neurotic, and psychotic scales. The anxiety scales and the correlations were positive and statistically significant [15]. In the current study, the scale construct validity was verified by presenting it to eight specialised arbitrators at Al-Balqa Applied University. They all expressed their approval on all scale items.

#### Reliability of the Anger Scale as a State and as a Trait

C. D. Spielberger et al. verified the scale reliability in its original form by calculating the internal consistency coefficient, which amounted to 0.93 [15]. The

current study calculated the internal consistency coefficient using Cronbach's alpha equation on a survey sample. The scale reliability coefficient amounted to 0.84, which is a good reliability coefficient and meets the current study objectives.

#### Correction of the Anger Scale as a State and as a Trait

The anger scale included thirty items, and study participants' responses to them were measured on a fourth scale that included the following options: rarely, occasionally, frequently, and consistently (assigned 1, 2, 3, and 4 points, respectively). Therefore, the scale degrees range between 30 and 120 degrees, where the higher the degree, the higher the indicator of the level of anger as a state and as a trait among individuals.

#### Second: Strategies for Coping with the Anger Scale

The Miers et al's. scale identified individuals' positive or negative responses to vexing anger situations [36]. The adjusted version of the scale consisted of 34 items distributed on six domains: the direct expression of anger, represented by items (1, 7, 13, 16, 22, 25, 28); emphasis, represented by items (14, 21, 24, 29, 32, 34); search for social support, represented by items (2, 8, 15, 20, 26, 31); dissipation of anger, represented by items (3, 6, 9, 17, 30); avoidance, represented by items (10, 12, 18, 19); and tapering, represented by items (11, 4, 23, 27, 33).

#### Validity of the Scale of Strategies for Coping with Anger

The verification of scale validity was performed in two ways:

Content validity: The scale in its original form consisted of 37 items, and to verify its validity, we presented it to eight specialised arbitrators, who all expressed their approval of the scale items and its appropriateness for the research purposes.

Construct validity: The verification of scale structure validity was performed by implementing it on a survey sample, and based on the responses of the sample members, items with weak correlation coefficients were deleted with their domains; those amounted to 3 items, and therefore the scale in its final form contained 34 items divided into six domains.

#### **Reliability Scale of Strategies for Coping with Anger**

The verification of scale reliability in its original form was done by calculating the internal consistency (Cronbach's alpha coefficient) for the degrees of survey sample members on this scale. The internal reliability coefficients ranged from 0.78 to 0.89, meaning the scale has reasonable reliability.

#### **Correction of Strategies for Coping with Anger**

The scale consisted of 34 items, and the member's response to them was on a five-point scale that included alternatives (applicable at a shallow degree and given one degree; applicable at a low degree and given two degrees; applicable at an intermediate degree and given three degrees; highly applicable and given four degrees; and very highly applicable and given five degrees). The higher degrees of positive domains (emphasis, search for social support, and dissipation of anger)

and the low degrees of negative domains (expression of anger, avoidance, and concentration) indicated that the respondent used good strategies and techniques to deal with anger.

#### **Study Procedures**

The study was implemented according to the following steps by us:

Prepared study instruments and extracted indications of their validity and reliability;

Identified the study sample and the classes that agreed to participate and completed the questionnaires;

Clarified the response mechanism after the distribution of scales to sample members and responded to the questions of sample members after they were given sufficient time to complete the answers;

Collected scales, where 280 questionnaires were implemented, and 24 invalid questionnaires were excluded because the answers on the items were not completed;

Entered the data into the computer memory, processed it, and analysed it statistically using the Statistical Analysis Program (SPSS).

#### **Statistical Analysis and Processing**

The means and standard deviations were used to identify the strategies for coping with anger as a trait among the study sample members. Also, the means and standard deviations were used to answer the second and fourth questions (the social status and educational achievement variables). The double variation analysis (two-way ANOVA) was used to determine the statistical significance between the means of the study sample members' estimations on the items of the study tool related to the strategies of coping with anger as a whole as well as on the items of the strategies of coping with anger as a trait. The means and standard deviations examined the social status and educational achievement variables. The two-way MANOVA was used to determine the statistical significance of apparent differences between the means of the study sample members' estimates on each item domain of strategies for coping with anger, as well as on each domain of strategies for coping with anger as a trait according to the study variables.

#### **Results and Discussion**

The research question is presented and discussed according to its order as follows:

#### Anger: A State or a Trait?

RQ1. Is the anger among Irbid University College female students a state or a trait? The means and standard deviations of the study sample members' estimates on the items of the study instrument related to anger as a state and as a trait were calculated and used to answer this question, as shown in Table 1.

Table 1 The sample estimates concerned anger as both a state and a trait

Anger	Mean*	STDEV	Rank
State	2.37	0.56	1
Trait	2.40	0.60	2

Table 1 shows that anger is considered a trait among female students at Irbid University College, with a mean of 2.40 and a standard deviation of 0.60. This result is possibly attributed to the fact that female students at the university stage are exposed to provocative situations and psychological, academic, and family pressures that cause anger frequently; therefore, female students, in the end, tend to realise that the majority of these situations are harmful, irritating, and cause anger, which is reflected in their behaviours and becomes a personality trait.

#### Anger, Social Status, and Achievement Level

RQ2. Does anger among female students of Irbid University College differ from a state or trait according to social status and achievement level?

We calculated the means and standard deviations of study sample members' estimates on the items of the study instrument related to anger as a state and a trait according to the social status and level of educational achievement variables to answer this question, as presented in Table 2.

Table 2
The sample's estimates related to anger as a state and as a trait, according to
"Social status" and "Educational achievement" variables

		Social status								
Anger	Educational achievement	Married		Sin	gle	Overall				
		Mean	STDEV	Mean	STDEV	Mean	STDEV			
	More than 80	2.37	0.64	2.36	0.60	2.36	0.60			
State	From 68 – less than 80	2.33	0.56	2.48	0.54	2.42	0.55			
State	From 80 and more	2.27	0.65	2.30	0.51	2.29	0.57			
	Overall	2.32	0.60	2.40	0.54	2.37	0.56			
	More than 80	2.37	0.59	2.33	0.56	2.35	0.56			
Tuoit	From 68 – less than 80	2.36	0.60	2.53	0.61	2.45	0.61			
Trait	From 80 and more	2.25	0.64	2.40	0.57	2.34	0.60			
	Overall	2.32	0.61	2.46	0.59	2.40	0.60			

It is noticed from Table 2 that there are apparent differences between the study sample members' estimation means on the items of the study tool related to anger as a state and as a trait, according to the variables (social status and educational achievement), and to determine the statistical significance of these apparent differences, we implemented the two-way ANOVA as displayed in Table 3 below.

The results revealed that there was no statistically significant difference at  $\alpha=0.05$  between the two averages of the study sample members' estimates on the study tool items related to anger as a condition and as a feature due to the variables of social status and academic achievement and the interaction between them. This can be attributed to married and unmarried female students of all levels of educational attainment facing the same economic, social, and educational conditions. Therefore,

there is a similarity in the lifestyle, way of thinking, and way female students deal with stressful situations in their academic and social lives.

Table 3
Two-way ANOVA of study sample members' estimates on the items of study
tool related to anger as a state and as a trait, according to "Social status" and
"Achievement level" variables

Anger	Variable	SS	DF	MS	F-value	Sig*
	Social status	0.147	1	0.147	0.463	0.497
	Achievement level	0.742	2	0.371	1.170	0.312
State	Social status × Achievement level	0.257	2	0.129	0.406	0.667
	Error	79.594	251	0.317		
	Adjusted total	81.262	256			
	Social status	0.392	1	0.392	1.095	0.296
	Achievement level	0.752	2	0.376	1.052	0.351
Trait	Social status × Achievement level	0.257	2	0.129	0.359	0.698
	Error	89.767	251	0.358		
	Adjusted total	92.019	256			

<sup>\*</sup> Statistically significant at the level  $\alpha = 0.05$ 

It is noticed from Table 3 that the statistical significance value for the social status variable of anger as a state and as a trait was more significant than  $\alpha=0.05$ , which indicates the nonexistence of statistically significant differences at  $\alpha=0.05$  between the means of the study sample members' estimates on the items of the study tool related to anger as a state and as a trait because of the variable social status. The results also showed that the statistical significance value for the achievement level variable of anger as a state and as a trait is greater than the statistical significance level of  $\alpha=0.05$ , which indicates the nonexistence of statistically significant differences at the level  $\alpha=0.05$  between the means of the study sample members' estimates on the items of the study tool related to anger as a state and as a trait due to the achievement level variable.

The statistical significance value for the interaction between the social status and achievement level variables of anger as a state and as a trait is greater than the statistical significance level of  $\alpha$  = 0.05, which indicates the nonexistence of statistically significant differences at the level  $\alpha$ =0.05 between the means of the study sample members' estimates on the items of the study tool related to anger as a state and as a trait because of the interaction between the variables "Social status" and "Achievement level".

#### Female Students' Anger Management Strategies

RQ3. What are the strategies for coping with anger among female students at Irbid University College?

To answer this question, the researchers calculated the means and standard deviations of sample members' evaluations on the items of the study instrument related to strategies of coping with anger as a whole and of each domain (direct expression of anger, affirmation, search for social support, dissipation of anger, avoidance, and concentration), as illustrated in Table 4.

Table 4
The sample estimates related to strategies of coping with anger as a whole, and each domain in a descending order according to means

No.	Domain	Mean	SD	Rank	Level
3	Search for social support	3.97	0.66	1	High
6	Concentration	3.76	0.76	2	High
5	Avoidance	3.74	0.67	3	High
2	Affirmation	3.63	0.69	4	High
4	Dissipation of anger	3.61	0.82	5	High
1	Direct expression of anger	3.53	0.67	6	Medium
	Strategies of coping with anger as a whole	3.70	0.51		High

Table 4 shows that the overall strategies for coping with anger among female students at Irbid University College were high, with a mean of 3.70 and a standard deviation of 0.51. The third domain, "Search for social support", came in first with a mean of 3.97% at a high level, followed by the sixth domain, "Concentration", which came in second with a mean of 3.76% at a high level. In contrast, the first domain, "Direct expression of anger", came in sixth and last place with a mean of 3.53 at a medium level. It is possible to attribute this result to the reactions of married and unmarried female students at the university stage toward situations that promote anger, which is governed by social and religious customs, traditions, and systems that force them to seek social support in these situations from their family and friends out of their desire to maintain positive and successful social relationships.

The results demonstrated that strategies for dealing with anger (by searching for social support) came first. This result is attributed to the reactions of married and unmarried female students at the university level to attitudes that provoke anger, which is governed by customs, traditions, and social and religious systems that force them to ask for social support in these situations from family and friends in order to maintain positive and successful social relationships.

#### **Coping Strategies for Anger Variation**

RQ4. Does the use of strategies for coping with anger as a whole and in each domain among female university students vary according to social status and achievement level?

To answer this question, we calculated the means and standard deviations of study sample members' estimates on the items of the study instrument related to strategies of coping with anger as a whole, according to the "Social status" and "Achievement level" variables as shown in Table 5.

Table 5
The sample estimates on the items of study tool as a whole, according to "Social status" and "Achievement level" variables

	Social status								
Achievement level	Married		Sin	gle	Overall				
	Mean	STDEV	Mean	STDEV	Mean	STDEV			
Less than 80	3.35	0.64	3.62	0.55	3.52	0.59			
68 – less than 80	3.85	0.57	3.62	0.46	3.72	0.52			
80 and more	3.79	0.52	3.72	0.39	3.74	0.44			
Overall	3.77	0.58	3.65	0.45	3.70	0.51			

It is noticed from Table 5 that there were apparent differences between the means of the study sample members' estimates on the items of the study tool related to strategies of coping with anger, as a whole, according to "Social status" and "Achievement level" variables. The two-way ANOVA was implemented to determine the statistical significance of these apparent differences, as shown in Table 6.

Table 6
Two-way-ANOVA for the sample estimates on strategies of coping with anger, as a whole according to "Social status" and "Achievement level" variables

Variable	SS	DF	MS	F-value	Sig
Social status	0.008	1	0.008	0.032	0.859
Achievement level	1.736	2	0.868	*3.508	0.031
Social status × Achievement level	1.630	2	0.815	*3.293	0.039
Error	62.114	251	0.247		
Adjusted total	65.933	256			

<sup>\*</sup> Statistically significant at the level ( $\alpha = 0.05$ )

It is noticed from Table 6 that the statistical significance value for the social status variable amounted to 0.859, which is greater than the statistical significance level of  $\alpha$  = 0.05. This indicates the nonexistence of statistically significant differences at the level  $\alpha$  = 0.05 between the two means of the study sample members' estimates on the study tool items related to coping strategies with anger due to the social status variable. Also, the results showed that the statistical significance value for the achievement level variable amounted to 0.031, which is less than the statistical significance level of  $\alpha$  = 0.05, which indicates the existence of statistically significant differences at the level  $\alpha$  = 0.05 between the means of the study sample members' estimates on the items of the study tool related to strategies of coping with anger as a whole due to the achievement level variable. To identify for whom those statistically significant differences were in favour, Scheffe's Test for Post Hoc Comparisons was used, as shown in Table 7.

Table 7
Scheffe's Test Post Hoc Comparisons for the members' estimates on the items of study tool as a whole, according to "Achievement level" variable

			Achievement level	
Achievement level	Mean	Less than 68	From 68 – less than 80	80 and more
		3.52	3.72	3.74
Less than 68	3.52	-	*0.20	*0.22
From 68 – less than 80	3.72		-	0.02
80 and more	3.74			-

It is noticed from Table 7 the existence of statistically significant differences in favor of female students who have an achievement level of (80 and more) in

comparison with the female students who have an achievement level of (less than 68, from 68 – less than 80, and 80 and more).

Also, we calculated the means and standard deviations of study sample members' evaluations on each domain of study tool related to strategies of coping with anger (direct expression of anger, affirmation, search for social support, dissipation of anger, avoidance, and concentration) according to "Social status" and "Achievement level" variables, as shown in Table 8.

Table 8 The members' estimates on each domain of study tool related to strategies of coping with anger, according to "Social status" and "Achievement level" variables

		Social status							
Achieve	ement level	Mar	ried	Sin	gle	Overall			
		Mean	STDEV	Mean	STDEV	Mean	STDEV		
	more than 80	2.86	0.85	3.41	0.74	3.20	0.82		
Direct expression of	from 68 – less than 80	3.49	0.74	3.56	0.60	3.53	0.66		
anger	from 80 and more	3.52	0.63	3.75	0.56	3.66	0.60		
	Overall	3.43	0.74	3.61	0.61	3.53	0.67		
	more than 80	2.94	1.00	3.56	0.70	3.32	0.87		
Affirmation	from 68 – less than 80	3.56	0.68	3.67	0.67	3.62	0.68		
Allifination	from 80 and more	3.51	0.67	3.87	0.52	3.74	0.61		
	Overall	3.47	0.74	3.73	0.63	3.63	0.69		
	more than 80	3.65	0.87	4.00	0.66	3.87	0.75		
Search for social	from 68 – less than 80	4.01	0.79	3.98	0.57	3.99	0.67		
support	from 80 and more	4.03	0.67	3.95	0.58	3.98	0.62		
	Overall	3.97	0.77	3.98	0.58	3.97	0.66		
	more than 80	3.67	0.76	3.52	0.82	3.57	0.79		
Dissipation of anger	from 68 – less than 80	4.03	0.84	3.33	0.75	3.62	0.86		
Dissipation of anger	from 80 and more	3.76	0.89	3.50	`0.69	3.60	0.78		
	Overall	3.90	0.86	3.41	0.73	3.61	0.82		
	more than 80	3.60	0.62	3.63	0.66	3.62	0.64		
Avoidance	from 68 – less than 80	4.12	0.60	3.49	0.64	3.76	0.70		
Avoidance	from 80 and more	3.94	0.69	3.63	0.58	3.74	0.64		
	Overall	4.00	0.65	3.56	0.62	3.74	0.67		
	more than 80	3.60	0.85	3.61	0.85	3.61	0.84		
Concentration	from 68 – less than 80	4.10	0.69	3.61	0.69	3.81	0.73		
Concentration	from 80 and more	4.10	0.62	3.52	0.80	3.74	0.79		
	Overall	4.04	0.70	3.57	0.75	3.76	0.76		

It is noticed from Table 8 that there were apparent differences between the means of the study sample members' estimates on each domain of the study tool related to strategies of coping with anger (direct expression of anger, affirmation, search for social support, dissipation of anger, avoidance, and concentration), according to the "Social status" and "Achievement level" variables. To define the statistical significance of these differences, the two-way MANOVA was implemented, as shown in Table 9.

Table 9 Two-way-MANOVA for members' estimates on each domain of study tool related to strategies of coping with anger, according to "Social status" and "Achievement level" variables

Variation source	Domain	SS	DF	MS	F-value	Sig
	Direct expression of anger	3.389	1	3.389	7.962*	0.005
Social status	Affirmation	5.598	1	5.598	12.631*	0.000
Hotelling's Trace =	Search for social support	0.301	1	0.301	0.686	0.408
0.237	Dissipation of anger	5.718	1	5.718	9.316*	0.003
Sig = 0.000*	Avoidance	3.922	1	3.922	9.975*	0.002
8	Concentration	5.322	1	5.322	10.074*	0.002
	Direct expression of anger	5.414	2	2.707	6.360	0.002
Achievement level	Affirmation	4.263	2	2.131	4.809	0.009
Wilks' Lambda =	Search for social support	0.718	2	0.359	0.818	0.443
0.936	Dissipation of anger	0.237	2	0.119	0.193	0.824
Sig = 0.171	Avoidance	0.888	2	0.444	1.130	0.325
	Concentration	1.456	2	0.728	1.378	0.254
Wilks' Lambda =	Direct expression of anger	1.520	2	0.760	1.786	0.170
	Affirmation	1.857	2	0.928	2.095	0.125
0.929	Search for social support	1.005	2	0.502	1.144	0.320
* * * * - *	Dissipation of anger	3.460	2	1.730	2.819	0.062
Sig = 0.103	Avoidance	3.227	2	1.614	4.104	0.018
	Concentration	1.992	2	0.996	1.885	0.154
	Direct expression of anger	106.832	251	0.426		
	Affirmation	111.247	251	0.443		
Error	Search for social support	110.256	251	0.439		
EIIOI	Dissipation of anger	154.078	251	0.614		
	Avoidance	98.682	251	0.393		
	Concentration	132.600	251	0.528		
	Direct expression of anger	115.287	256			
	Affirmation	121.140	256			
Adjusted total	Search for social support	111.679	256			
Adjusted total	Dissipation of anger	172.144	256			
	Avoidance	114.728	256			
	Concentration	148.971	256			

<sup>\*</sup> Statistically significant at the level ( $\alpha = 0.05$ )

It is observed from Table 9 that the statistical significance value of Hotelling's trace test for the social status variable amounted to 0.000, which is less than the statistical significance level of 0.05. This indicates the existence of statistical significance in at least one of the domains. The variation analysis table shows statistically significant differences at the level of 0.05 between the means of the study sample members' estimates on the domains (direct expression of anger, affirmation, dissipation of anger, avoidance, and concentration) due to "Social status" variable. The table of means shows statistically significant differences between female married students and single female students in the domains of dissipation of anger, avoidance, concentration, and direct expression of anger and affirmation. The results also show that Wilks' Lambda test statistical significance for the achievement level variable was 0.171, greater than the statistically significant level of  $\alpha = 0.05$ . This indicates the nonexistence of statistically significant

differences in the study tool domains related to coping strategies (direct expression of anger, affirmation, search for social support, dissipation of anger, avoidance, and concentration) according to the "Achievement level" variable. Also, the statistical significance value of Wilks' Lambda test for the interaction between the two variables ("Social status" and "Achievement level") amounted to 0.103, more significant than the statistical significance level of  $\alpha = 0.05$ . This indicates the nonexistence of statistically significant differences in the domains of the study tool related to strategies of coping with anger (direct expression of anger, affirmation, search for social support, dissipation of anger, avoidance, concentration), according to the interaction between the two variables ("Social status" and "Achievement level").

This demonstrates that the variable of social status caused a statistically significant difference ( $\alpha = 0.05$ ) between the two mean estimates of the study sample at a distance (direct expression of anger, assertion, dissipation of anger, avoidance, and reflection). Table 5 shows that there was a statistically significant difference among the female students (married) in the domain (dispelling anger, avoidance, and contemplation) and in favour of the female students (single) in the domain (direct expression of anger and emphasis). This is because married female students are more socially aware when dealing with stressful situations out of concern for emotional stability and success in married life. As for unmarried female students, they need to be more aware and insightful in dealing with life situations. They express themselves directly when exposed to anger, especially when there is an apparent infringement on their rights and property. The "Academic achievement" variable also showed no statistical significance in the study tool domains related to strategies for dealing with anger (direct expression of anger, stress, seeking social support, dispelling anger, avoidance, and reflection). This explains why female students of all achievement levels use a variety of anger-management strategies in their daily academic and social lives.

It was also found that there was no statistical significance in the domains of the study tool related to strategies for dealing with anger (direct expression of anger, stress, seeking social support, dispelling anger, avoidance, and reflection), according to the interaction between the two variables: "Social status" and "Academic achievement". This explains that married and unmarried female students of different levels of academic achievement practise all strategies for dealing with anger according to the situations they face daily.

#### **Conclusions and Recommendations**

The findings revealed that anger is a trait among female students at Irbid University College. This result is attributed to the fact that female students are at the undergraduate level, the provocative situations they are exposed to, and psychological, academic, and family pressures that frequently lead to anger. These attitudes tend to be negative and cause anger, which is reflected in their behaviour and becomes a feature of their personality.

Also, the results revealed that there was no statistically significant difference at a = 0.05 between the two mean estimates of the study sample members on the items of the study tool related to anger as a condition and as a feature due to the variables of social status and academic achievement and the interaction between them. This can be attributed to married and unmarried female students of all levels of educational attainment facing the same economic, social, and educational conditions. Therefore, there are similarities in their lifestyle, way of thinking, and how they deal with stressful situations in their academic and social lives.

Besides, the results showed that strategies for dealing with anger (searching for social support) were ranked first. This result is attributed to the reactions of married and unmarried female students at the university level to attitudes that cause anger and are governed by customs, traditions, and social and religious systems that force them to seek social support in these situations from their family and friends with a desire to maintain positive and successful social relations.

Furthermore, the results revealed a statistically significant difference (a = 0.05) between the two mean estimates of the study sample at a distance (direct expression of anger, assertion, dissipation of anger, avoidance, and contemplation) attributed to the social status variable. The difference is statistically significant for the married female students in the domains "dispelling anger, avoidance, and contemplation" in favour of the single female students in the domains "direct expression of anger, and emphasis". This is because married female students are more socially aware of stressful situations to maintain emotional stability and success in their marriage and possessions.

The study helps enrich the theoretical literature related to the topic of anger in the future. It can also help researchers, scholars, and students enrich their knowledge by clarifying the relationship between the discussed variables and some other variables. The practical importance of the current study is seen in terms of the results that were obtained, which will help to draw the attention of educational officials by identifying the relationships between anger as a state and anger as a trait and the coping strategies with the interpretation of some prevailing behaviours among female students. Thus, they can develop and build programmes that help reduce the character trait of anger among female students. The coping methods reflected positively on their social and academic adaptation levels.

In light of the current results, the study recommends emphasising the school role in dealing with students' anger behaviours and teaching children how to control anger responsibly. There is a need to educate parents and teachers by holding specific programmes and meetings about the methods of family upbringing and their impact on children. Further studies dealing with observational and midwifery methods are needed.

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