

# ANGER AND ITS RELATIONSHIP TO ACADEMIC INTROVERSION AMONG A SAMPLE OF UNIVERSITY STUDENTS

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**Abstract:** The aim of the current research is to identify the relationship between anger and academic introversion among university students. The researchers used the descriptive, exploratory, and correlational approach to achieve the research objectives. The research population consisted of four colleges at Diyala University for the academic year (2025-2026), two of which were scientific and two humanities, totaling (6704) male and female students. The researchers selected (100) male and female students from them. The researchers also used Hamza's (2012) scale to measure anger and Eysenck's (1964) scale to measure introversion. The research results showed that university students suffer from a high level of anger, with males differing from females, as males are angrier. The results also showed that university students have a high level of introversion, with females being more introverted than males. There is also a direct correlation between anger and the level of academic introversion among university students.

**Keywords:** Anger, Academic Introversion, University Students, Emotional Regulation, Social Withdrawal.

## Introduction

The emotions of individuals in adolescence are characterized by a kind of impulsiveness that may not be appropriate to the actual situation, as well as the degree of control over anger, its extent, and how it is managed. Anger behavior and its consequences are affected by the methods the individual uses to express it. [1] Anger is an innate force present in all humans, but what distinguishes it is the power to control and channel it harmlessly or in a way that suits the situation it arose from. The intensity of anger varies with different stressful situations, and its consequences are influenced by the methods an individual uses to express it. This leads some to withdraw and isolate themselves, a common approach among many individuals, as a way to express a mechanism for dealing with anger [2]. This is what the researchers observed in light of the rapid development in modern technology, as well as the stressful events that accompanied the outbreak of the Coronavirus pandemic. The measures imposed by this pandemic represented significant psychological pressure on most individuals in Iraqi society in general, and on young people in particular, given their high activity and desire for personal and psychological connection with each other and with the opposite sex. This is evident in the characteristics of their developmental stage. Consequently, they faced constraints that limited their developmental behaviors that align with... Their age group, therefore, some problems have emerged that have begun to appear clearly in our current society in general and university students in particular, represented by the behavior of anger generated by pressure, confinement and distancing from social communication among them, as well as introversion away from society and their isolation from it. This is what the two researchers noticed in light of their

daily dealings with a sample of university students. Therefore, the two researchers defined their problem in the current research by identifying these two conditions that are expected to worsen due to the current circumstances among university students. The problem of the current research is summarized in the following question: "To what extent has the emotion of anger worsened among university students? And to what extent has the state of introversion spread among them?"

#### Importance of research

The topic of anger has attracted the attention of many specialists in the field of psychology, including [3]. The topic of anger appears to have a special and critical importance in the lives of individuals, especially those in adolescence. Adolescence is the special period in which biological, mental and social change takes priority. Also, severe anger is one of the most important dangers of that stage, in which the expression of different feelings is characterized by strength, violence and speed, in addition to the lack of experience in dealing with situations that provoke anger and sometimes the abundance of conflicts and challenges that the individual faces in adolescence or youth in general [4]. Koniecchi and Heimel indicate that the adolescent gets angry when he feels disrespected and insulted by others, as well as when there is an obstacle that prevents him from satisfying his desires, and as a result of imitating people older than him who he sees as models of the image of the strong man, in order to reach the point of being recognized as strong by others and having his own independent entity. Thus, the growth of anger is linked to the growth of the identity that the individual tries to build in the stage of adolescence [5].

#### Research objectives

The current research aims to identify:

1. Level of anger among university students.
2. Identifying differences in anger levels according to gender (males)–(females)
3. Level of introversion among university students.
4. Identifying differences in the level of introversion according to the gender variable (males)–(females)
5. Identifying the relationship between anger and academic introversion among university students.

#### Research boundaries

The current research is limited to students of Diyala University, morning studies, for the academic year 2025– 2026

#### Defining the terms:

##### First: Anger

1. Ahmed defined it as "a state of feeling characterized by aggressive emotional agitation" [6].
2. Spielberg defined it as "a state of emotional agitation accompanied by physiological changes of varying symptoms" [7].
3. Hans Tuch defined it as "a state of consciousness characterized by high activity of the sympathetic nervous system and a feeling of dissatisfaction caused by a real or imagined error" [8].

Anger is operationally defined as "the total score a student receives on the anger scale."

##### Second: Introversion

1. Freud defined it as "the withdrawal of libido which leads to the employment of internal psychological constructs of an imaginary nature." [9]
2. Jung defined it as "the struggles of the infantile soul, which is the separation of the libido from its external objects and its withdrawal into the inner world" [10].
3. Hassan and Sharaf defined it as "the isolation of the individual from those around him and not joining them or participating with them in any group activity, and remaining mostly alone and lonely" [11].

The researchers define introversion operationally as "the total score obtained by the student on the introverted personality scale."

#### Theoretical framework

##### First: Anger

The concept of emotion is very broad and encompassing, including all emotional states and their various forms, such as love, hate, anger, anxiety, etc. The emotional aspect cannot be separated from our personalities; it complements their development alongside the intellectual and physical aspects, contributing to personal growth. Therefore, the emotion of anger is part of this complementary aspect of our personalities. Life without the emotion of anger would not constitute personal fulfillment for any individual. [12] Anger is one of the most important innate emotions possessed by many types of living beings, not just humans. It is born with the organism, and its function is to preserve life and defend the organism [13]. If you ask any individual about anger, or whether they have experienced its extreme or mild forms, they will certainly answer yes, and the physiological and mental changes that accompany these states affect their responses in general [14].

The concept of anger

Williams and Ballou [15] define anger as an emotion charged with hatred, revenge, and a desire for aggression. Goodon [16] defines it as an unpleasant emotion that overcomes a person, arising from a state of tension and agitation, accompanied by physical, cognitive, and emotional changes and a lack of self-control. Werter and Page [17] define anger as an internal emotion arising from frustration and remaining internal. It turns into external behavior, and then aggression arises. There are two elements of anger: anger as a state, which is in the form of psychological and biological emotions that change in intensity from moderate to severe anger over time through the individual's perception of frustration resulting from an obstacle to goal-directed behavior. The other element is anger as a trait, which refers here to individual differences in perceiving and interpreting the situation and what it requires in terms of emotional agitation. Is it frustrating and annoying? Does the individual respond to it to a greater degree than anger as a state, or is it a normal state that does not actually generate emotional expression or emotional agitation? Al-Aqqad [18] indicates that the events or the situation in themselves are not the cause of feeling angry, but rather how the individual perceives and interprets these events is what creates anger [19].

Individuals differ in their ways of expressing and responding to anger. Some deny and suppress anger, which leads to depression and psychosomatic illnesses. It may take the form of withdrawal, escape, and isolation from others. Some may blame themselves or others, or they may explode, use violence, and direct severe blame accompanied by harm towards others [20].

Namca is distinguished by [21] There are two types of anger:

1. Healthy anger: It is a logical and acceptable emotional reaction to physical harm and mistreatment to which an individual is exposed, and through which he tries to protect himself. This is a typical response to a situation that requires anger without exaggerating the angry action.
2. Unhealthy anger: This is anger resulting from irrational thoughts and negative feelings, which is based on unacceptable reasons to justify the anger. This type requires a high level of self-awareness to control and regulate it. Its symptoms appear in a high physical form and have negative effects on behavioral components, as well as on the individual's relationship with others [22].

□ Causes of anger (theoretical explanations of anger)

There are many explanations for the behavior of anger; Ellis sees [23] argues that an individual may adopt irrational general ideas and flawed thinking patterns such as "must," "should," and "must," all of which lead to emotional disturbances when the nature of these words is altered. An individual may also adopt ideas...! notFalse rationality linked to anger, and as a result For this The individual becomes agitated and more sensitive.!With deficiency and inadequacy, And whenAnger increases, and its effects extend to areas other than where it originated, leading to psychological and social maladjustment. As Ellis asserts, a person can manage anger by adhering to rational thought. However, if they allow irrational thoughts to control them, they lose the ability to fully address the situation that actually warrants anger towards others. They become unable to control their emotions, confront and resolve their problems, and instead create further problems as a result of their anger. Ellis presented a model (A, B, C) which sees that A is the situation or event, C is the resulting behavior as a response to the situation or event, and B

is the thinking that accompanied the interpretation of the situation. It mediates between the two sides between the situation and the response. Thus, A is not the cause of C occurring, but rather B is what created a mental state that provided the necessary pattern for the response. It is believed that the state of modification or control of B may avoid many angry behaviors that affect the individual's being and personality [24].

The existentialist school also sees that anger arises from living without meaning. This theory is concerned with the existence of a goal in life that the individual strives to achieve and endures hardships for. If the individual realizes that his life is worth living in order to achieve this goal, he will move positively towards life. However, if the individual lives without a goal to strive to achieve, then this situation makes him susceptible to feelings of anger, guilt, and self-blame. Likewise, failure to find a worthy goal to strive for also creates aversion to things in the individual and causes him annoyance. One of the sources of anger is annoyance [25].

The biological theory also explained anger as having an organic biological origin acquired through heredity, as a result of a certain hormonal imbalance in the adrenal gland that secretes adrenaline. In contrast, the cognitive theory sees that the cause of anger is a mental origin due to irrational thoughts, false beliefs, and illogical interpretation of events. It is the cause of the anger disorder that the individual feels, not the event itself. The individual's way of thinking and his interpretation of the situation he is exposed to is what generates the motive behind the anger [26].

As for the behavioral theory, it sees anger as a learned behavior in different ways and through conditioning processes, where these behaviors are reinforced and then anger is generalized to similar and analogous situations, to obtain the same reinforcements or comfort that anger brings in the original situation. As for the psychoanalytic theory, it sees anger as the most important manifestation of the aggressive instinct in man, and anger needs to satisfy his desires and release unconscious repressions.

Anger may arise due to a health disorder, such as general illness or a malfunction in the nervous system, which causes rapid emotional agitation. Anger may also arise from psychological causes, stemming from psychological stress or pressures, or a feeling of inferiority and emotional provocation. Anger may also have a socio-cultural origin, meaning it is caused by cultural factors that generate a state of personality perfection through anger. Anger is also an important instinct that ignites in a person the spirit of zeal and sacrifice for the sake of their lofty goals and ideals, such as defending the faith and preserving lives, property, and dignity. Whenever a person is stripped of this instinct, they become vulnerable to humiliation, enslavement, and degradation. It is considered praiseworthy as long as it is within the bounds of logical, social, and religious expressions. Outside these frameworks, it is considered a reprehensible trait when a person overdoes their anger and expresses it

#### Anger

Anger has negative effects and consequences on all levels, whether on the level of human behavior (physical, mental, emotional) or social (the individual's relationship with others), such as heart attacks, high blood pressure, general spasms in various parts of the body, including muscles, nervous tremors, and other effects whose consequences are not bearable if the situation continues with each instance of anger. Cognitive mental effects also appear as a result of anger, represented by the loss of the ability to think. Memory is also greatly affected by the emotion of anger. Many studies and experiments have confirmed a decrease in the level of problem-solving among those who suffer from anger attacks continuously. There are also general personal effects represented by a lack of self-confidence, the aversion of others to the angry person, his isolation, and his failure to participate in matters that require discussion and dialogue. Effects also appear on the professional level, such as decreased productivity and dissatisfaction with life and oneself

Grossman (2006) identified the manifestations of anger as follows:

1. Mood changes affect the individual as a whole, not just a specific part of the body.
2. External changes are manifested through the change that occurs in the individual's behavior.
3. Internal changes that manifest their effects on the body, such as an increased heart rate.

4. Anger has an expressive aspect that manifests itself through body movement and readiness for aggression, such as a change in tone of voice.

Secondly, introversion (Introverted)

It refers to self-absorption or withdrawal into oneself, a terminological concept used by Jung to denote a tendency to direct attention inward and toward the self, rather than toward the outside world and people. Things or the outside world, and introversion is classified as a psychological illness that affects children, so that the child's private life is far from the surroundings, which makes it very difficult for him to communicate with others and interact with the surroundings. For example, the child finds it difficult to understand the emotions that others express and then respond according to those emotions. This is not found in the normal child, who expresses it in words or behavioral reactions. Introversion creates an atmosphere of disturbances, unreal illusions, and a confused world

Introversion

It is a personality type. Its formation is governed by factors of heredity and environment, and it is characterized by individual. This personality type is characterized by its withdrawal from the outside world, living instead within its own world of imagination, feelings, and ideals. It is hesitant, shy, and sensitive, and is distinguished by... With weakness and scarcity. He is energetic and distrustful of his surroundings, with all his attention focused on himself; his relationships with others are characterized by narrowness and depth. This is one of the important problems that has begun to be focused on in light of the rapid change that has accompanied technological development. Research has begun into the biological characteristics to search for people who have a predisposition to introversion, by observing brain function and neural connections

Characteristics of an introvert

An introverted personality is a behavioral pattern that develops as a result of an individual's exposure to experiences or social conditions that do not satisfy their psychological and emotional needs, leading to a tendency towards isolation and weak integration into close social relationships. Its most prominent characteristics include the following:

1. The tendency to keep thoughts and feelings to oneself and not to disclose them easily.
2. The tendency towards reflective and idealistic thinking in interpreting situations and events.
3. Hesitation in making final decisions as a result of excessive analysis and thinking.
4. Weak social interaction and a lack of desire for broad social participation.
5. Focusing more on personal interests and desires than on the external environment.
6. Limited social relationships and being content with a small number of close people.

Theories explaining introverted personality

Jungian theory

Swiss psychiatrist Carl Jung believes that individuals can be classified according to two main patterns of behavior and personality: introversion and extroversion, each with its own distinct psychological and behavioral characteristics.

1. The introverted personality: It is characterized by the individual's preoccupation with his inner world and his relative distance from social interaction. The introverted person also tends to be reserved, shy, and avoids excessive mixing with others, with a clear interest in contemplation and deep thinking. Therefore, this pattern appears among some thinkers, philosophers, and scientists.
2. The extroverted personality: This represents the opposite pattern to introversion, as the individual tends towards social interaction, openness to the external environment, and a tendency towards activity and social participation.

Jung was among the first scientists to address the concept of introversion in a systematic and scientific manner. His interest in this topic began at the start of the 20th century, when he linked introversion to certain psychological traits associated with anxiety, obsessive thoughts, and excessive mental preoccupation. He believed these traits could be reflected in an individual's behavior and interaction with their environment. In 1913, Jung developed his famous classification of extroversion and introversion,

describing hysteria as the mental illness affecting extroverts and psychiatry as the mental illness affecting introverts.

Carl Jung emphasizes that the distinction between extroverted and introverted personalities cannot be absolute or fixed, because individual differences between people are numerous and vary according to situations and circumstances. An individual may exhibit introverted behavior in a particular situation while behaving differently in other situations, and the same applies to the extroverted personality

Jung also believed that a person's psychic energy, whether in extroverts or introverts, can manifest through unconscious behavioral patterns that appear spontaneously in daily actions and observations. He divided psychological processes into mental and non-mental processes, the latter including sensation and intuition, and based on this, he classified individuals into four main categories:

1. The category of thinkers.
2. The emotional category.
3. The sensory category.
4. The intuitive category.

Each of these patterns is associated with varying degrees of introversion or extroversion. An individual may tend to be more intellectual, emotional, sensory, or intuitive than others, and accordingly, their dominant behavioral traits are determined. Some of the most prominent of these patterns are:

First: The introverted thinking style: This style tends towards an interest in the inner world and abstract ideas, and relies to a great extent on contemplation and mental analysis. It is also characterized by calmness, little talking, and preoccupation with deep thinking more than interaction with the external environment.

Second: The introverted emotional type: Its owner is characterized by the dominance of emotional and affective aspects of his personality, with a clear tendency towards psychological sensitivity and preoccupation with subjective feelings. He often prefers isolation and avoids social interaction, and lives in an inner world dominated by contemplation and daydreams. The owner of this type tends towards silence and isolation.

C. The introverted-sensory type: This type is dominated by emotional experiences, and he interprets things from his own point of view. He is also imaginative and believes in ghosts.

D. The Introverted Inspirational Style: Individuals with this style tend to live in their inner world and are relatively detached from their social environment. They are drawn to unconventional ideas and issues of a mysterious or profound nature. This style may be observed in some individuals with strong intellectual, religious, or political leanings.

The difficulty of placing individuals within fixed and specific classifications is highlighted because human personality is characterized by overlap and complexity, as an individual may have more than one personality type at the same time

Factors and causes of introversion

Introversion is a complex behavioral pattern that cannot be attributed to a single cause, but rather results from the interaction of a range of psychological, social, and environmental factors, most notably:

1. Physical factors: Introversion may be linked to certain physical characteristics or health problems related to body shape or functions, such as visible deformities, extreme shortness, lameness, or other traits that may lead an individual to feel inadequate or sensitive to how others view him.
2. Mental and cognitive factors: Mental abilities and academic achievement affect the formation of introverted tendencies, especially when an individual is constantly compared to others, particularly those who surpass him in terms of abilities or status, which reinforces his feeling of inadequacy and pushes him to avoid social situations that may cause him embarrassment or anxiety.
3. Parenting styles and overprotection: Depriving a child of opportunities for self-reliance as a result of overprotection and constant intervention by parents limits their ability to adapt socially and face life situations independently, which may contribute to the development of introverted traits or a tendency towards dependent and controlling behavior.

4. Parental harshness: Some parents resort to harshness and abuse when dealing with their children, believing that this is the surest way to correct their behavior and condition. This approach may begin in childhood, and the child or adolescent may comply with these commands and prohibitions due to weakness or moral obligation, without having the opportunity to think. And when a child is given space to think, understand, and respond, and this is met with approval and encouragement from their parents, which strengthens their desire to continue. However, if they are deprived of this, they gradually lose the most important elements of psychological balance, their self-confidence is shaken, and they tend to withdraw into themselves.

5. Inconsistency and a lack of consistency in treatment pose a significant risk to a child. A child might receive kind and understanding treatment in one situation, only to be met with harshness or punishment for the same behavior in another. This inconsistency leads to psychological distress, weakens the child's sense of security, negatively impacts their self-image, and may cause them to withdraw into themselves and live in a state of constant inner conflict.

6. The psychological climate within the family is a fundamental factor in the holistic development of a child's personality. Relationships characterized by tension or family breakdown, along with a lack of trust and mutual respect, contribute to weakening a child's self-confidence and may cause feelings of anxiety and distress. Permanent.

Children also need balance in their relationships, both within the family between their parents and with others, because any imbalance can lead to feelings of insecurity or rejection. This, in turn, can result in a negative self-image, which in turn affects their overall personality development.

Some prevention and treatment methods related to introverted personality

1.6. Parents and teachers should avoid constant blaming and reprimanding, and instead rely on a guidance approach that involves clarifying and thoughtfully discussing mistakes. Developmental differences should also be considered; some mistakes are normal at certain stages, and it is best to deal with them patiently until the child's development is complete and they can be guided gradually.

2. The need to search for positive motives that connect the adolescent with his peers or the introverted individual with his companions to replace the negative motives that distance him from them. It is preferable that these motives be included in school activities and work that require, when practiced, the serious practice of cooperation and participation. Then the individual discovers aspects of his strength and importance in the life of the group, and also discovers that weaknesses exist in all people, so there is no need for him to be sensitive to them or anxious because of their existence.

3. The school should provide activities that suit students' abilities and interests, giving each student the opportunity to succeed. When a student experiences success initially, it leads to subsequent successes, which boosts their self-confidence and increases their ability to face the demands of future life with greater confidence.

4. It is important to provide individuals with opportunities to express themselves through diverse activities, such as arts, sports, and music. This helps them channel their energies positively and prevents them from withdrawing into their own world or becoming preoccupied with daydreaming. It is also preferable to encourage their participation in group activities, especially if these are more beneficial than individual activities

#### Previous studies

First: Studies that addressed anger

1. Arshid entitled "The effect of a guidance program to develop some life skills in reducing anger and increasing life satisfaction among adolescents"

The study aimed to measure the effect of a life skills-based guidance program on reducing anger and increasing life satisfaction among a sample of adolescents. The research population consisted of (124) tenth-grade students in a school in Abu Dhabi. The researchers used the Anger as a State Scale and the Life Satisfaction Scale. A random sample of (30) students was selected who received the guidance

program on life skills and anger, while the control group did not receive any program. The results of the study showed that there was an effect of the program in reducing anger and increasing life satisfaction

2. Abu Laban entitled "The emotion of anger among children enrolled in residential institutions and those not enrolled in them in the governorates of Jerusalem and Bethlehem"

This study, which aimed to identify the level of anger among children enrolled in residential institutions and those not enrolled (a comparative study), consisted of a population of children aged 14-18 years residing in residential institutions, totaling 248 children. The study sample consisted of 174 children, with 100 not enrolled and 74 enrolled. The researchers developed the anger scale, and the study results showed a real difference between those enrolled and those not enrolled, in favor of those enrolled, as a significant increase in anger was observed among them

3. Al-Sharif entitled "Anger Behavior and its Relationship to Family Upbringing Styles among High School Students in Amman"

The study aimed to reveal the level of anger behavior and its relationship to family parenting styles among secondary school students in Amman. The study sample consisted of (310) male and female students who were randomly selected from the community. To achieve the study objectives, an anger scale was prepared, as well as a parenting styles scale. The study showed the existence of significant differences attributable to the effect of the grade and the existence of a significant correlation between anger behavior and the authoritarian style

Second: Studies that addressed introversion:

1. Hassan and Sharaf entitled "The effectiveness of an integrated activity-based program to reduce introversion in gifted children"

The study aimed to identify the effectiveness of an integrated activities-based program in reducing introversion in gifted children. The research population consisted of (20) children present in schools for gifted children. The researchers developed a program based on classroom activities to reduce introversion among them. The researchers adopted Ali Al-Sharif's (2000) scale of isolation, and the research results showed a real and significant effect of the prepared program in reducing the level of introversion among gifted children

2. Al-Zamili (2010) entitled "Isolationism or Introversion in Some Children"

The study aimed to identify the level of isolation or introversion among children aged (5 to 12). The research population consisted of (200) children who were randomly selected, and adopted. The researchers used the Young's scale for children's isolation, and the results of the study showed the existence of real isolation among children aged (5-6) years, while no real isolation was observed among older children

3. Ahmed (2015) entitled "Introversion and its relationship to the emergence of aggressive behavior among students in private and public schools": A field study on a sample of middle and high school students of both genders in the Hail region–Saudi Arabia .

This study aimed to identify the relationship between introversion and aggressive behavior among public and private school students, including those in middle and high school. The study sample consisted of (300) male and female students randomly selected from middle and high school students in Hail schools. The researcher used the Introversion Scale and the Aggressive Behavior Scale, and employed appropriate statistical methods such as Pearson's correlation coefficient and analysis of variance. The results of the study showed a positive relationship between introversion and aggressive behavior, as well as a difference between males and females in the relationship, in favor of males

## Materials and Methods

First: Research Methodology

The researchers adopted the descriptive-exploratory approach based on observing what exists. This approach is suitable for the nature and objectives of the current research, as it is based on describing, analyzing, and interpreting the studied variables and the influences that exist between the phenomena. It also helps to present a future picture in light of current indicators (Van Dalen, 1985: 312). Brook also

points out that...Broq) states that no method of sampling testing, however accurate, can be employed unless the population from which the sample is taken is accurately described, because each population has its own characteristics (proq: 1981 p 204).

Second: The research community

The concept of the research community is defined as all the elements of the phenomenon being studied. The researchers thus define the study population as all individuals included in the subject of the research problem, to whom the results will be generalized (Odeh & Malkawi, 1992: 106). The current research population consists of students from the Faculty of Humanities Education, numbering (6704)(2884) males and (3820) females.

Table (1) Research Community

College	Males	females	the total
Education for the Humanities	986	1236	2222
Education for Pure Sciences	892	1032	1924
Veterinary medicine	243	561	804
the sciences	763	991	1754
the total	2884	3820	6704

Third: Research Sample

to withdraw The researchers selected it using stratified random sampling, and its size was (100(male and female students, with a total of (50Males and the same number of females.

Table (2) Research Sample

College	Males	females	the total
Education for the Humanities	12	13	25
Education for Pure Sciences	13	12	25
Veterinary medicine	12	13	25
the sciences	13	12	25
the total	50	50	100

Fourth: Search tools

To achieve the objectives of the current research, two tools were needed to measure the research variables, namely (anger and introversion). Therefore, The researchers provided two tools to measure the level of each, as follows:

1. Anger meter

Adoption The researchers measured (Hamza, 2012) and it consists of (20A section measuring anger through verbal responses (self-report) with a graduated scale. five(Likert) starts with (always) and is given a weight of 3, (sometimes) and is given a weight of 2, and (rarely) and is given a weight of 1. The lowest score obtained by the examinee is (20And the highest degree (100With a hypothetical average of

(60) degrees, the researchers verified the suitability of the instrument for the current research by extracting its psychometric properties as follows:

□ Honesty validity

The concept of validity refers to the extent to which items accurately measure the intended concept (Faraj, 1997: 227). The researchers verified the validity of the scale items by identifying:

□ The construction of the Euphrates is a measure of anger:

To determine the construct validity of the anger scale, the researchers used the correlation method using Pearson's correlation coefficient (the product of moments) to find the value of the relationship between the item score and the total score of the scale. All items of the scale showed true significance, as the critical value of Pearson's correlation coefficient reached (0.25) at a significance level of 0.05 and 160 degrees of freedom. The researcher determined the construct validity using Pearson's product of moments, which kept all items.

Table (3) Item Correlation Values with the Total Scale Score

Paragraph	Correlation value	Paragraph	Correlation value
1.	0.33	11	0.46
2.	0.29	12	0.49
3.	0.47	13	0.50
4.	0.49	14	0.42
5.	0.37	15	0.48
6.	0.53	16	0.60
7.	0.54	17	0.44
8.	0.49	18	0.56
9.	0.38	19	0.51
10.	0.44	20	0.47

### Steadfastness Reliability

The concept of reliability of a measurement tool refers to the consistency of scores in expressing the magnitude of the function (Faraj, 1997: 281). The researchers verified the reliability of the scale using two methods of analysis of variance: Cronbach's alpha and the split-half, where Cronbach's alpha reached (0.181) and the split-half reached (before correction 0.64, and after using the corrected Spearman-Brown formula, the reliability for the entire scale reached (0.67) as shown in Table (4):

Table (4) values of anger stability using Cronbach's alpha equation and the split-half method

variable	Alpha – Cronbach	Half splitting	
		Before correction	After correction
Anger	0.81	0.64	0.67

## 2. Introversion scale

Adoption The researchers used Eysenck's (1964) scale for introverted personality traits, translated by Muhammad Abdul Khaliq (1991). The scale consists of 22 items. The test-taker answers a question using a five-point Likert scale, starting with "Always" (weighted 5) and ending with "Rarely" (weighted 1), with the highest score being 110. The score represents the lowest level of introversion, and the highest score (100) represents the highest level of introversion, with a theoretical average of (60). The researchers extracted the psychometric scale characteristics as follows:

The internal consistency of the scale is valid.

Internal consistency of a scale is determined by finding the correlation coefficient between the total scale score and the score of each individual item. This correlation coefficient is then compared to the critical value of the correlation coefficient (the tabulated value) without squaring the correlation coefficient. If the resulting correlation coefficients are equal to or greater than the critical value, the item is considered consistent with the rest of the scale, valid, and remains on the scale. The researcher used Pearson's correlation coefficient to determine the correlation coefficient values on a sample of (100) male and female students, as shown in the table (sample table). The critical value of the correlation coefficient at a significance level of (0.05) and degrees of freedom of (99) was (0.197), which is less than all the resulting correlation coefficients. Therefore, all items on the scale are consistent and valid in measuring Introversion. As shown in Table (4)

Table (5) Table of correlation value per paragraph

Paragraph	Correlation value	Paragraph	Correlation value
1-	0.43	12-	0.69
2-	0.41	13-	0.74
3-	0.56	14-	0.73
4-	0.83	15-	0.77
5-	0.83	16-	0.54
6-	0.66	17-	0.83
7-	0.72	18-	0.72
8-	0.81	19-	0.33
9-	0.52	20-	0.65
10-	0.69	21-	0.47
11	0.32	22	0.50

Scale stability

Reliability means that if the same individual's score is repeatedly measured, it will show some consistency. It also means objectivity, meaning that the individual receives the same score regardless of who grades or administers the test. A reliable scale is one that can be depended upon (Abdulrahman, 1983: 1996). To verify this, reliability was determined using two methods.

1- Test-Retest: The reliability coefficient used in this method is called the time-retest stability coefficient. It requires administering the scale to the reliability sample after a period of (3-4) weeks. The researcher

re-administered the randomly drawn questionnaires, distributing them to the same individuals according to their numerical code, after (3) weeks to a randomly selected sample of (50). The researcher then calculated the reliability coefficient (Pearson's correlation coefficient) to determine the relationship between the first and second administrations. The reliability value was (0.70), and the critical point for the correlation coefficient was (0.197). Thus, the researcher confirmed the validity and reliability of the instrument used in the current research, enabling her to achieve the desired research objectives. The results are shown in Table (5).

2- Reliability using Cronbach's Alpha: This method measures the consistency of an individual's performance from one item to another and indicates the strength of the correlation between the items on the scale (Awda, 1998: 191). To verify the reliability of the scale used in the current research, the researcher used the reliability coefficient alpha.ALPHA, where the researcher randomly drew (50) questionnaires distributed to the sample, identifying them with a numerical code to verify the reliability of the test, and the reliability coefficient was calculated in this way, as the reliability of alpha reached (0.81), and this value is considered acceptable in this way for the reliability of the scale, as shown in Table (5).

Table (6) Reliability values of the scale Introversion My method (Cronbach's Alpha - test and retest)

scale	stability values	
	Cronbach's Alpha	Test and retest
Introversion	0.81	0.70

### Result and Discussion

The first objective: To identify the level of anger among students of the College of Education at Diyala University:

To achieve the first objective of the research, the researchers used a one-sample t-test, comparing the sample mean with the hypothetical population mean from which the sample was drawn. The sample mean was (80.65) with a standard deviation of (10.48), and the hypothetical population mean was (60). The test results showed a real difference between the sample mean and the population mean, in favor of the sample mean, as the calculated t-value was (19.704), which is greater than the critical t-value of (2.00) at a significance level of (0.05) and degrees of freedom of (99). This indicates a high level of anger among students of the College of Education, as shown in the table (7)

Table (7) Results of a one-sample t-test to identify the level of anger among students of the College of Education

variable	arithmetic mean	standard deviation	hypothetical mean	T value		Significance level (0.05)
				Calculated	The schedule	
Anger	80.65	10.48	60	19.704	2.00	Function

The second objective: To identify the differences in anger levels between male and female students in the College of Education.

To achieve the second objective of the research, the following was usedThe researchers conducted an independent samples t-test, comparing the arithmetic mean of males (86.60) with a

standard deviation of (11.84) and the arithmetic mean of females (74.05) with a standard deviation of (22.78). The test results showed a real difference between the two means, in favor of the males' mean, as the calculated t-value was (3.457), which is greater than the critical t-value of (2.00) at a significance level of (0.05) and degrees of freedom of (98). This means that the level of anger is higher among males than females, as shown in the table (8)

Table (8) Results of an independent samples t-test for the difference in anger levels between males and females

Samples	average	deviation	valuet		Significance level at (0.05)
			Calculated	The schedule	
Males	86.60	11.84	3.457	2.00	Function
females	74.05	22.78			

Third objective: To identify the level of introversion among students of the College of Education  
 To achieve the third objective of the research, the following was usedThe researchers conducted a one-sample t-test, comparing the sample mean with the hypothetical population mean from which the sample was drawn. The sample mean was (51.57) with a standard deviation of (13.60), and the hypothetical population mean was (66). The test results showed a real difference between the sample mean and the population mean, in favor of the sample mean, as the calculated t-value was (10.610), which is greater than the critical t-value of (2.00) at a significance level of (0.05) and degrees of freedom of (99). This indicates a lower level of introversion among students of the College of Education, as shown in the table (9)

Table (9) Results of a one-sample t-test to identify the level of introversion among students of the College of Education

variable	arithmetic mean	standard deviation	hypothetical mean	T value		Significance level (0.05)
				Calculated	The schedule	
Anger	51.57	13.60	66	10.610	2.00	Function

Fourth objective: To identify differences in introversion between male and female students in the College of Education

To achieve the fourth objective of the research, the researchers used the t-test for two independent samples, comparing the arithmetic mean of males (49.93) with a standard deviation of (15.74) with the arithmetic mean of females (53.21) with a standard deviation of (13.98). The test results showed a real difference between the two means, in favor of the males' mean, as the calculated t-value was (1.102), which is less than the critical t-value of (2.00) at a significance level of (0.05) and degrees of freedom of (98). This means that there is no real difference between males and females in the level of introversion, as shown in the table (10):

Table (10) Results of an independent samples t-test for the difference in anger levels between males and females

Samples	average	deviation	value		Significance level at (0.05)
			Calculated	The schedule	
Males	49.93	15.74	1.102	2.00	Non-functional
females	53.21	13.98			

Fifth objective: To identify the relationship between anger and academic introversion among university students

The researchers used Pearson's correlation coefficient to identify the relationship between anger and academic introversion. Pearson's correlation coefficient showed a positive relationship of (0.68) between anger and the level of introversion, which is a statistically significant value, as the critical value of Pearson's correlation coefficient was (0.195) at a significance level of (0.05) and degrees of freedom of (98), as shown in Table (11).

Table (11) Value of the correlation between anger and the level of academic introversion among university students

The two variables	Sample	Correlation value		Significance level at (0.05)
		Calculated	The schedule	
Anger * Academic withdrawal	100	0.68	0.195	Function

Recommendations:

1. Committees were appointed to oversee youth welfare at the university.
2. Psychological follow-up for students who exhibit extreme and severe emotions by the committee formed and specialized in the field of psychological treatment.
3. A dedicated psychological counseling center will be established to deal with cases of anger and introversion.

Suggestions:

1. Conducting a study on the effect of anger on academic achievement among university students.
2. A study of the relationship between introversion and personality types among university students.
3. A study of the causal relationship between introversion and the resulting behavior among pre-university students.

## Conclusions

The study aimed to assess the degree of anger and introversion for students in Diyala University as well as finding the relationship between these two variables. Results showed that university students were very angry but low in introversion compared to the theoretical average. A gender-based analysis revealed that male students were significantly angrier than female students and males and females did not respond differently with regard to introversion. Similarly, the results indicated a significant positive correlation between anger and introversion at 0.74 ( $\alpha < 0.05$ ); thus high anger tendencies correlated to reduced socializing and more withdrawal from society among students. These findings emphasize the need for psychological care of students at university level, including counselling services and psychological support programs as well as interventions to improve emotional regulation and social adjustment. This study extends the literature on how students respond psychologically in modern social and academic contexts, and more importantly underscores that institutions need mechanisms for monitoring the emotional wellbeing of their students. Further studies are suggested for the effect of anger

on academic performance, the relationship of introversion with other personality dimensions and causal pathways linking introversion to other behavioral and psychological outcomes among university students or pre-university students.

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