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# Academia Open



*By Universitas Muhammadiyah Sidoarjo*

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## Table Of Contents

<b>Journal Cover .....</b>	<b>1</b>
<b>Author[s] Statement .....</b>	<b>3</b>
<b>Editorial Team .....</b>	<b>4</b>
<b>Article information .....</b>	<b>5</b>
Check this article update (crossmark).....	5
Check this article impact .....	5
Cite this article .....	5
<b>Title page .....</b>	<b>6</b>
Article Title.....	6
Author information .....	6
Abstract .....	6
<b>Article content.....</b>	<b>7</b>

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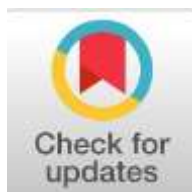
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## The Mental Handsomeness Among University Students

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### Abstract

**General Background:** Mental attractiveness, or mindfulness, represents a cognitive strategy enabling individuals to engage flexibly with new experiences and generate creative solutions, playing a crucial role in academic performance and psychological well-being. **Specific Background:** University students, as key contributors to societal development, require enhanced mental capabilities to navigate complex learning environments and manage psychological stress effectively. **Knowledge Gap:** Despite its importance, no prior research has examined mental attractiveness among Arab or Iraqi university students, leaving a significant void in understanding how this cognitive trait manifests across different demographics in higher education settings. **Aims:** This study investigated the degree of mental attractiveness among Wasit University students and examined statistically significant differences based on gender (male-female) and academic specialization (scientific-humanities). **Results:** Analysis of 400 students using Langer's (1992) mental attractiveness scale revealed that university students possess high levels of mental attractiveness ( $M=49.70$ ,  $SD=4.65$ ), with no statistically significant differences according to gender ( $F=0.852$ ) or specialization ( $F=0.026$ ). **Novelty:** This represents the first empirical investigation of mental attractiveness among university students in the Iraqi context, establishing baseline measurements for this population. **Implications:** The findings suggest that mental attractiveness transcends gender and disciplinary boundaries, indicating universal cognitive flexibility among university students that can inform educational interventions promoting mindful learning practices and psychological resilience across diverse academic programs.

**Keywords :** Mental Attractiveness, University Students, Langer Theory, Gender Differences, Academic Specialization

### Highlight :

- University students demonstrate high levels of mental attractiveness regardless of background.
- Gender and academic specialization show no significant impact on mental attractiveness.
- Mental attractiveness enhances psychological well-being, self-confidence, and academic performance.

Published date: 2026-01-19

## Chapter One

### First: Research problem:

Advanced nations seek creativity in every field of science and knowledge. They also work to guide and facilitate methods of innovation and creativity, and they dedicate their attention to encouraging a new approach by launching into the horizon of scientific creativity, discovery, and cognitive progress. Everyone must exert their utmost efforts, as well as paying attention to the ideas and mental field of students, especially university students, and working to develop their mental skills, as they are the future. Mental sophistication is one of the main pillars of civilizational progress enjoyed by developed countries, given its great importance in human progress and its ability to help them keep pace with development in facing the problems of daily life, as well as to meet the challenges of the future. All of this is due to highlighting creative and scientific production in various sciences, because whenever developed countries experience shortcomings in a particular field, they quickly rise up and are not incapable of reaching the goal, but rather they move forward towards the future with what the present and future require, reaching growing creative horizons that come beyond the limits of time and place. Therefore, paying attention to the concept of mental sophistication, as it is a scientific concept, requires us to pay attention to creativity in our educational institutions. Psychologists also see that the change and development that is happening in our human society demonstrates the extent of the need to develop higher mental abilities in new ways, means and methods, because some of the goals of developed nations cannot be achieved except by relying on mental abilities, especially mental abilities.

The researcher believes that using mental activity (mental) in acquiring knowledge means that the individual is aware of the production or generation of ideas and concepts and how to process information. Also, taking into account the use of learning styles reveals his inclinations, attitudes and his ability to retain knowledge.

The mental attractiveness that an individual practices in most of his behaviors, if not due to the upbringing and socialization provided by many entities such as the family, school, university, and the local community, and all these institutions may favor certain patterns of thinking in the brain over others. Hence, educators have sought to diversify the patterns of thinking in the brain [1].

### Second: The importance of the research:

University education plays an important role in shaping and building the mindset of societies, as the university represents the pinnacle of the education and learning pyramid. It also represents the final stage in preparing qualified and highly trained human cadres with knowledge, science, education, culture, and professionalism, and is an effective means of advancing universities.

The importance of the research lies in the concept of intellectual attractiveness, given that university students are key elements in society that contribute to the new construction and scientific progress. It is necessary to develop and enhance these scientific abilities and direct them in the right way, with a purpose for the future, in order to prepare them for society, as they are the group that can manage all areas of life because of the scientific qualifications they possess that enable them to manage their tasks successfully [2].

Mental attractiveness is the foundation and core of the mind, and it is the basis and source of human behavior, as it influences and is influenced by human knowledge, being the basis of cognitive mental activity.

There is no doubt that intellectual attractiveness plays a major role in shaping an individual's thinking style, enabling them to form their personality and directly influencing how they generate, process, and handle information within the human mind [3].

Mental sophistication is a healthy cognitive strategy essential for academics because it helps students understand their needs, remain calm, act effectively, and deal appropriately with different situations. An academic who integrates mental practices into the teaching process acts wisely and consciously toward their own thoughts, ensuring they don't influence judgment in the current situation. This, in turn, positively impacts their personal life, increasing their self-confidence and ability to apply these practices.

The topic of mental attractiveness has been studied by some researchers to try to understand the rapid thinking methods that individuals use in processing the knowledge and skills they learn. The nineties witnessed a huge knowledge explosion in research on the human mind, which was called the decade of the human brain. Individuals with mental attractiveness and creativity communicate with each other, and this shows that they have strategies that enable them to overcome problems arising from poor communication and incompatibility.

Mental attractiveness makes the individual think that the feeling and sensation of anxiety are merely thoughts and not realistic reflections, and do not require defense mechanisms, as it directs the individual's thoughts to pay attention to other aspects [4].

The reason behind the increasing interest in studying the functions of the mind as a locus of mental abilities, especially the abilities of quick and alert thinking, is related to the learning process and academic achievement, which helps educators and those in charge of the educational process to understand the complexity of the learning process [5].

Research into the human mind has also gained financial support and attention, with its topics being featured prominently in scientific journals. Mental agility enables individuals to recognize and recall patterns of responses and rapid, alert thinking, leading to correct reasoning focused on cognitive functions [6]. Furthermore, mental agility helps individuals perform several important cognitive functions, including visualization, comprehension, and understanding, through mature learning methods and the formulation of learning strategies, and it assists them in solving the problems they face.

The importance of the current research stems from the fact that it deals with an important segment of society, namely university students, because they represent the enormous energy and important human resource in the development and advancement of society, which makes their abilities improve and change their ways of thinking, education, and directing their motives towards acquiring science and knowledge.

The following points highlight the importance of the current research, as noted by the researcher:

1. According to the researcher's knowledge, there is no scientific research study that has addressed the study of mental attractiveness among university students, whether Arab or Iraqi, previously.
2. An individual's feeling of mental attractiveness positively impacts their sense of acquiring knowledge and learning.



3. Consideration should be given to students possessing intellectual attractiveness, which is reflected in their performance and good ways of thinking.

**Research objectives:** This research aims to identify:

1. The degree of intellectual attractiveness among university students.
2. The significance of statistical differences in mental attractiveness among university students according to the variables of gender and specialization.

#### **Research limitations:**

The current research is limited to students of Wasit University for morning studies for the academic year (2024-2025).

#### **Defining the terms:**

1. **(Kabat Zinn, 1994):** Directing an individual's attention automatically towards a goal in the present moment [7].
2. **Langer (Langer, 2002):** Flexible mental activity, open to new and effective experiences, enabling the individual to create new and different things [8].
3. **(Dibbets et al., 2006):** It is the individual's ability to quickly and diversely generate ideas and shift mental focus to suit different situations [9].
4. **Identification (Hassed 2016).** It encompasses a wide range of educational applications, including promoting mental health, improving communication, empathy, and emotional development, enhancing physical health, and boosting learning and performance [10].
5. **(Muawad 2021):** The process of consciously organizing and engaging with the experience occurring within the current plan, approaching it with curiosity and acceptance without judgment or identification, and the self-regulation, insightful understanding, and flexibility that this entails [11].

**Theoretical definition:** Based on what has been mentioned, the researcher adopts the definition of (Langer, 2002) in his current research.

**Operational definition:** It is the total score obtained by the respondent (student) on the mental attractiveness scale used in the current research.

## **Chapter Two: Theoretical Background**

Mental attractiveness is the primary goal in developing ideas through creative scientific methods. It is not a way to get rid of negative thoughts, but rather to achieve a state of improved mental health, as well as being a mental and spiritual approach free from intellectual constraints [12].

Mental attractiveness also plays a vital role in education and learning, as it helps learners improve their academic performance. It is an effective way to focus their attention on how to respond to tasks. It can also be used as a recall tool or a reminder when planning an experiment or discussing a topic. It is a simple reminder. These mental habits are involved in effective thinking. By developing these skills and talents, in addition to their scientific importance, they have a significant social function in social interaction. The university is a point of contact between generations, a hub for genuine engagement with social values and concepts, and a tool for expanding knowledge about what is happening in this world [13].

Furthermore, mental attractiveness influences the development of decision-making strategies. It enhances an individual's strength and willpower by boosting self-confidence and self-awareness, which reduces adherence to outdated ideas and beliefs. This enables students to distinguish between effective learning styles appropriate to the stimulating university learning environment, making education active, purposeful, and engaging. The results of this are reflected in the student's personality and thinking. Since learning styles are essentially cognitive approaches to learning situations and individual preferences regarding how they learn easily and effectively—in terms of receiving, processing, and analyzing information—a flexible student, capable of adapting to outdated and ineffective methods, open to new approaches, and innovative in adopting methods that suit their abilities and the demands of the environment [14], is considered a valuable asset. Mental attractiveness is a crucial topic currently being discussed in the field of positive psychology. Its importance stems from the modern trends among researchers in psychology and mental health, who emphasize the need to focus on the positive aspects of human life rather than the negative ones [15].

Mental attractiveness helps improve an individual's psychological well-being, as well as increasing their level of support in various situations that contribute to a good life for the individual. Being mentally attractive makes it easier to enjoy life through full engagement in various life activities. It also helps them to deal with negative events and situations positively, and protects them from falling into future fears or past regrets. Mental attractiveness also helps the individual, through mental training, to slow down previous thoughts, get rid of negativity, and calm the mind and body.

Mental attractiveness is not an innate trait or ability in humans, but rather a good trait that the thinking individual acquires. Individuals must be trained and taught from a young age about mental attractiveness (mentality), so that they can go beyond the limits of their selfishness and embark on the world of good ideas to get to know others and understand their intentions by encouraging them to expand their studies and reading continuously to maintain the appropriate store in memory and to analyze and judge some of the life situations that they encounter in their studies or in their public lives.

Individuals possessing a range of mental characteristics, such as quick wit, diverse ideas, a wealth of answers, the ability to synthesize, analyze, evaluate, and use evidence in decision-making, the capacity to seek cause-and-effect relationships, a broad perceptual capacity, and the ability to propose different alternatives in problem-solving, are considered intellectually attractive. They also possess the ability to make judgments outside of conventional norms, assessing ideas, situations, or phenomena after careful study and evaluation. Furthermore, they exhibit extensive reading, cognitive flexibility, creativity, proficiency in problem-solving, research and investigation skills, and a focus on meaning and relationships rather than simply information. Finally, they are distinguished by their intellectual sophistication, characterized by originality, intellectual fluency, and the ability to add to and expand upon existing ideas [16].

Mental attractiveness contributes to an individual's acquisition of psychological well-being, self-enrichment, psychological comfort, personal happiness, self-satisfaction, highly objective self-monitoring, patience, self-confidence, empathy for others, and self-respect. While mental



attractiveness has yielded numerous benefits in various aspects and fields of life such as education, art, medicine, and science, many now seek it for many reasons, the most important of which are reducing psychological stress and achieving mental health.

It was also linked Mental Attractiveness with philosophy, which is considered a fundamental approach in the contemplative journey, the individual focuses their attention and perception on a specific point, coinciding with a state of calm and stability [17].

### Theories of mental attractiveness:

#### 1. Theory (Rokeach, 1960) [18]:

This theory explains intellectual attractiveness by outlining a set of key principles that address an individual's level of intellectual attractiveness. The theory focuses on understanding an individual's thinking style, disregarding their beliefs. It clarifies intellectual attractiveness through an individual's approach to ideas, based on the concept of open-mindedness. This theory also emphasizes the diversity of ideas rather than their content. An open-minded individual can accept ideas from others and understand them without difficulty, despite differences in content from their own beliefs [19].

Also (Rokeach, 1960) distinguished between two patterns of mental attractiveness and mental closeness. In mental attractiveness, the individual's style is growing and developing, as he is interested in knowing the ideas and beliefs of others. He also has the ability to change his own ideas, and he accepts change and tolerates ambiguity. Each individual has a huge number of flexibilities in thinking that cannot be counted, as there is a total system of mental flexibility in the ideas, beliefs, expectations, attitudes, and conscious and unconscious assumptions that the individual accepts at a certain time. The individual's belief style depends on working on the cognitive framework that enables him to understand his world in the best way [18].

#### 2. Theory (Langer, 1989) [20]:

This theory refers to the behavior of mental attractiveness in individuals, which consists of interaction with the environment and the surrounding world, and it is as follows:

1. **Creating new categories and updating existing categories:** This indicates that this category of individuals possesses a mindset of attractiveness and is working on rethinking the categories into which individuals are classified, and the tools give us more options in performing new and better work.

2. **Modifying automatic behavior:** This is a point where individuals can take a fresh look at automatic behavioral patterns in order to modify and improve them for more desirable outcomes. It's often difficult to remember the characteristics of behaviors that have become automatic. In some cases, the automatic execution of tasks can become stagnant and unproductive. Those who help students identify the automatic patterns that limit them and prevent them from adapting to new situations can help them become more attentive.

3. **Commitment to new perspectives:** Individuals often form opinions that align with first impressions and hold onto these opinions even when opposing evidence emerges, which Langer calls "immature cognitive commitments".

4. **Emphasis is placed on action rather than results:** Here comes the emphasis on action rather than results, which makes us attentive to identifying the necessary steps. Accepting each stage according to its role by making changes and adjustments that lead to better results allows us to think about the next step rather than thinking about everything at the same time.

5. **Accepting doubt:** This refers to a more thorough examination of things, not accepting them as they are. Those who hold this view believe the world is constantly changing and don't accept results at face value, but rather investigate them. They are often reluctant to jump to conclusions and leave it at that. They are not easily swayed by simple answers to complex questions. While the desire to accept doubt may stem partly from personality, it can be cultivated in all individuals [20].

## Chapter Three: Research methodology and procedures

### First: Research Methodology:

The research methodology used in the current research is the descriptive method, as it is the method that is most suitable for achieving the research objectives:

### Second - The research community:

The research population consists of all students enrolled in the morning program at the University of Wasit during the academic year (2024-2025), across all colleges within the university, including those specializing in science and humanities.

### Third: The research sample.

The research sample consisted of (400) male and female students from the research population, selected by stratified random method. (205) of them were male students and (195) female students from four colleges: (2) from colleges with a scientific specialization and (2) from colleges with a humanities specialization.

### Third: Search tool.

After reviewing studies related to the current research topic, including mindfulness measures such as the Langer scale (The researcher adopted the scale prepared by (Langer, 1992) because it was suitable for the research sample and its objectives. The mental attractiveness scale consisted of (21) items.

## Steps for building the scale:

**First - Exploratory Test:** This step was taken to ensure the clarity of the research instrument instructions and the understanding of the items for the research sample. The researchers applied the scale to a sample of (40) male and female students who were selected using stratified random sampling, not construction sampling. They were selected equally according to the variables of gender, specialization, and academic level, as shown in Table No. (1) This explains it.

**Table 1:** The sample for the pilot study was distributed according to gender, specialization, and academic level.

Total	Student numbers		College
	Females Phase Four	Males Phase Four	
18	9	9	Education for the Humanities
18	9	9	Engineering
36	18	18	the total

**Second: Statistical analysis of the items on the mental attractiveness scale:** The aim of these procedures is to analyze the scale items, eliminate items that do not differentiate between respondents, and retain items that do differentiate between them. The purpose of calculating the discriminatory power of the items on the Mental Attractiveness Scale was to employ the two extreme groups method for analysis. To determine the discriminatory power of each item, an independent samples t-test was used. The results showed that the calculated t-value for all items on the scale was statistically significant after comparison. With a tabulated t-value of (1.96) at a significance level of (0.05) with a degree of freedom of (399), the scale thus consists of (21) items in its final form, and Table No. (2) This shows that.

**Table 2:** The discriminatory power of mental attractiveness paragraphs

Statistical significance	Calculated T-value	Lower group		Upper Group		T
		standard deviation	arithmetic mean	standard deviation	arithmetic mean	
statistically functional	4.737	0.66454	4.46	0.73675	4.43	1
statistically functional	5.934	0.67643	3.53	0.63535	4.82	2
statistically functional	3.725	0.95532	4.65	0.62552	4.64	3
statistically functional	5.383	0.95741	4.38	0.77432	4.92	4
statistically functional	6.742	0.56783	4.52	0.77753	4.52	5
statistically functional	5.733	0.84536	4.34	0.56723	4.68	6
statistically functional	5.463	0.84351	4.65	0.67428	4.69	7
statistically functional	6.677	0.80663	3.55	0.56387	4.53	8
statistically functional	5.873	0.78435	3.60	0.86513	4.67	9
statistically functional	4.963	0.86903	3.53	0.55433	4.83	10
statistically	5.966	0.85678	3.72	0.77632	4.71	11

functional						
statistically functional	6.643	0.89653	4.64	0.53635	4.70	12
statistically functional	5.364	0.55739	4.33	0.67384	4.58	13
statistically functional	5.873	0.95361	4.43	0.63535	4.83	14
statistically functional	6.695	0.78832	3.68	0.80513	4.71	15
statistically functional	5.614	0.78422	4.53	0.62742	4.63	16
statistically functional	5.488	0.85128	3.76	0.65532	4.74	17
statistically functional	4.943	0.90422	3.66	0.86429	4.63	18
statistically functional	6.973	0.79654	3.87	0.76342	4.63	19
statistically functional	6.667	0.73738	4.06	0.67282	4.75	20
statistically functional	4.539	0.98542	4.66	0.63298	4.77	21

**The relationship between the item score and the total scale score (internal consistency):**and This refers to the correlation between the score of each item on the scale and the total score on the mental attractiveness scale. In other words, the item measures the same conceptual characteristic as the overall scale score. Based on this indicator, the researcher used Pearson's correlation coefficient to determine the correlation between the score of each item on the scale and the total score of all the questionnaires. All items on the scale were retained because they showed a high correlation with the total scale score. All correlation coefficients were statistically significant when compared to the tabulated value (0.093), the significance level (0.05), and the degrees of freedom (399), as presented in Table 3.

**Table 3:** Relationship between item score and total score on the mental attractiveness scale

Correlation coefficient	Paragraph sequence	Correlation coefficient	Paragraph sequence
0.354	12	0.387	1
0.373	13	0.365	2
0.382	14	0.377	3
0.247	15	0.382	4
0.374	16	0.317	5
0.373	17	0.393	6
0.391	18	0.388	7
0.380	19	0.372	8
0.366	20	0.323	9
0.376	21	0.365	10
		0.393	11

## Psychometric properties Academic Hope Scale

- Honesty:** Validity is one of the most important conditions in constructing educational and psychological tests and scales. The validity of a scale is its ability to measure what it is designed to measure. Two validity indicators have been derived for the mental attractiveness scale, and the following explains how to obtain each of them:
- Apparent truthfulness:** The verification process for the current scale is when the scale items are presented to experts for evaluation and judgment on the validity of the items.
- The construction was genuine.** It is sometimes called construct validity, and the researcher found the availability of construct validity indicators in the mental attractiveness scale by distinguishing the scale items and the relationship of the score of each item to the total score of the scale. The researcher found that all items of the scale are well related, and through the verification process, the researcher found construct validity.
- Scale reliability:** The researcher extracted the reliability by using Cronbach's alpha reliability equation for the scale, which is (0.88).

**Statistical indicators for the mental attractiveness scale:** The descriptive statistical indicators of the research sample's responses to the mental attractiveness scale were extracted (Table No.4). It shows the scores of the sample members:

**Table 4:** Statistical indicators for the mental attractiveness scale

0.173	Standard error of distortion	91.653	Middle
0.801	The spread	2.75372	standard error
0.248	Standard error of kurtosis	97	The mediator
37	Range	98	The loom
82	lowest grade	4.64893	standard deviation
116	highest degree	24.477	Contrast
		-0.157	Twist

## Chapter Four:

**Presenting, interpreting, and discussing the research results:** This chapter includes the presentation and interpretation of the results, based on the results of the statistical analysis and in accordance with the research objectives, conclusions, recommendations and suggestions.

### First: Presenting the results:

**First objective: To identify the level of intellectual attractiveness among students** the university: The Mental Attractiveness Scale was applied to the current research sample to identify mental attractiveness among university students. After correcting the scale and conducting statistical analysis of the data, the arithmetic mean was (49.70) with a standard deviation of (4.65), and the hypothetical mean was (43). To determine the significance of the difference between the actual and hypothetical means, a one-sample t-test was used. The results showed that the calculated t-value was (28.83), which is greater than the critical t-value of (1.96). Therefore, it is statistically significant at a significance level of (0.05) with (399) degrees of freedom as presented in Table 5.

**Table 5:** The arithmetic and hypothetical means, standard deviation, calculated t-value, and tabulated t-value for the mental attractiveness of the research sample.

level Significance (0.05)	degree Freedom	Z-value		deviation Standard	Middle hypothetical	Middle Calculation	number Sample	variable
		The scheduled	Calculated					
statistically functional	399	1.96	28.83	4.65	43	49.70	400	Mental attractiveness

It is clear from the table above that university students enjoy a high level of mental attractiveness. The researcher explains this result as being due to scientific development and the role of technology, which has taken a large part in the development and growth of man, as well as increasing awareness, perception and understanding among students, as they receive their education in academic, educational and scientific institutions. The concept of mental attractiveness is one of the inherent traits of man that develops and enhances the self-organization of individuals and makes them people who are aware and conscious of their feelings and emotions, as well as having the capabilities to achieve and implement their goals clearly, enjoying the cognitive contemplation that is present mentally in the present times in order to respond as required in acquiring science and knowledge.

## Second goal: Statistically significant differences in mental attractiveness according to gender and Specialization

To investigate statistically significant differences in intellectual attractiveness according to gender and specialization, two-way ANOVA was used with unequal-sized samples to identify differences in intellectual attractiveness based on the variables of gender and specialization as explained in Table 6.

**Table 6:** Two-way analysis of intellectual attractiveness among university students according to the variables of gender and specialization.

Level of significance	Value calculated f	Average of squares	Degree of freedom	Sum of squares	Source of variation
0.05	0.026	1.211	1	1.211	Specialization
	0.852	32.428	1	32.428	Sex
	2.305	91,848	1	91,848	The interaction between specialization and gender
	-	45.664	596	2744.873	The mistake
	-	-	400	1394673	The total

Comparing the F values in the table above with the tabulated value of (3.86) reveals the following:

1. Differences according to gender: The F-value for the gender variable (males - females) was (0.852), which is less than the tabulated F-value (3.84). This indicates that there are no statistically significant differences according to the gender variable (males - females), meaning there is no difference in their level of mental attractiveness.
2. Differences according to gender: The F-value for the specialization variable (scientific - humanities) was (0.026), which is less than the tabulated F-value (3.84). This result indicates that there are no statistically significant differences in the level of intellectual attractiveness according to specialization (scientific - humanities). This suggests that students in the scientific specialization do not differ from their peers in the humanities specialization in terms of the level of intellectual attractiveness.
3. The value of the interaction between gender and specialization: The F-value of the interaction between gender and specialization reached (2.305), which is clearly less than the tabulated F-value (3.84). This indicates that there are no statistically significant differences in the interaction between gender and specialization. This indicates that the interaction between gender (male-female) and specialization (scientific-human) does not have an interaction that leads to an effect on males and females in the scientific specialization. Likewise, there is no difference between males and females in the humanities specialization in their level of enjoyment of attractiveness.

## Conclusions

1. University students possess a high level of intellectual attractiveness, with an awareness and understanding that allows them to accept immediate ideas and process them in real time.
2. There is no difference between university students in terms of gender and specialization in terms of mental attractiveness.

## Recommendations

1. Graduate students and researchers are urged to link the mental attractiveness variable to other variables that address different samples.
2. Involving university students in programs that develop and improve the scientific level and work to support them to increase the level of comprehension and awareness of what contributes to raising the level of mental attractiveness.
3. Holding courses and seminars that focus on increasing students' awareness of everything that helps them understand themselves and how to interact with others.

## Proposals

1. Work on conducting research similar to the current research topic on a sample of middle school students.
2. Conducting developmental research on the concept of mental attractiveness that addresses different age groups.

Work is underway to conduct research to identify intellectual attractiveness in relation to the variables of analytical and critical thinking.

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